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ABSTRACT

The thematic, integrated subject curriculum presented in this comprehensive teacher's guide is based on a study of Gallatin County's local history and is intended to enrich students' perceptions of their rural Montana culture, heritage, and environment, and provide them with a knowledge base for decision making about the future. Introductory material describes teacher involvement in the curriculum development process and gives the rationale for teaching the unit. Part 2 lists sub-units of the original theme organized by grade level as follows: wildlife, shelter--K-1; agriculture, ethnic backgrounds--2; folk lore, timber--3; early explorers, ranching--4; railroads, cities and towns--5; government, life styles--6; ecology, recreation--7; geography, Native Americans--8; education--K-8. Parts 3 and 4 list 18 broad goals for the program and outline specific types of activities to be developed in lesson plans. Activities are listed by sub-unit for each grade level under the subject headings of reading, language arts, mathematics, science, social science, art, music, and health/physical education. Part 5, the bulk of the guide, provides lesson plans that designate behavioral objectives, procedures to follow, and materials needed. Parts 6-8 contain appropriate vocabulary to be taught for each sub-unit, a guide to available human and material resources, and a sample format for assessing student performance on specific objectives. (JHZ)

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ED269185

GALLATIN HISTORY PAST TO PRESENT

A Multi-Age, Integrated Subjects Curriculum Unit

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Rural Schools Integrated Curricula Project

Generated by the Gallatin County Rural Schools and the Teachers' Resource Center, College of Education, Montana State University

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William D. Hall
Project Director

September 1985

RC 015686

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RURAL SCHOOLS INTEGRATED CURRICULA

SUMMARY

Nineteen rural teachers (K-8) from twelve districts located in Gallatin County, Montana, participated in a year long inservice project on developing thematic, multi-age, integrated subject curriculum units.

There were four phases to the project. Phase 1 consisted of three, day long inservice sessions that focused on basic skills in language arts, science and mathematics. These sessions were carried out so that the participants would be better able to incorporate basic skills development into the curriculum units they would be developing later in the project. Phase 2 consisted of learning a process for developing the integrated teaching units and actually developing them. The format followed for developing the units consisted of: 1) selecting a broad based theme; 2) developing a rationale statement justifying why the unit should be taught; 3) identifying appropriate sub-themes for the selected unit theme, by grade level K-8; 4) generating core activities by subject for reading/language arts, mathematics, science, social studies, art, music and physical education. These core activities outlined the possible scope of the unit; 5) writing lesson plans that specifically relate back to the identified core activities. These lesson plans consisted of a general focus statement, specific behavioral obectives, designated classroom activities, materials needed lists and teacher log section; 6) generation of appropriate vocabulary to be taught for each sub-unit; and 7) identification of resources needed, both material and human. The curriculum development phase of the project consisted of seven, all day sessions, with numerous, out of class hours of work. The culmination of this effort were four teaching units, entitled: 1) Gallatin History - Past to Present; 2) Oceans; 3) Outer Space; and 4) Weather.

Phase 3 brought three elementary education professors from Montana State University out to the rural schools to field test the units in the rural schools. Specific parts of each unit developed were selected, and then team or co-taught with the participating rural teachers in the project.

Phase 4 brought selected rural teachers to the campus of Montana State University so they could speak with college classes in teacher education about these types of units, and the benefits of teaching with thematic, multi-age, integrated subject curriculum units.

The benefits of utilizing this type of teaching-curriculum approach include: A more unified approach to teaching and learning, since all of the school subjects are associated to a common theme; efficiency of time because more than one subject can be taught at the same time; multi-age teachers involving all of their students, whatever their grade, in fairly common topics (the theme threads throughout each sub-unit); and increased excitement on the part of the students.

As a result of the Northwest Area Foundation funding the Rural Schools Integrated Curricula Project for $10,000, representative rural teachers of Gallatin County, Montana, have learned a process for developing these kinds of teaching units and copies of each of the four units developed have been distributed to each participating school. In addition, three copies of each unit will also be housed in the Teachers' Resource Center on the campus of Montana State University, for checkout purposes, for teachers located anywhere in the state of Montana.

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PREFACE

By design, this K-8 multi-age, integrated subject teaching unit will always be able to be expanded. The theme, "Gallatin History - Past to Present," is broad in scope and when coupled with all of the school subject areas, offers limitless options for expansion.

This unit outlines the theme so that a teacher can begin to teach with it. As the teacher envisions additional lessons and/or ideas, he/she can add to the already existing material. It is suggested that as teachers expand these units, they follow the format provided.

The unit is organized in the following way:

I.	Rationale	The statement justifying the need to teach the unit.
II.	Sub-units	Sub-strands of the original theme organized by grade level or range.
III.	General Objectives	Broad goals for the unit.
IV.	Core Activities	Specific types of activities, by subject, to be developed in the lesson plans. These core activities form the overall broad scope of the unit.
V.	Lesson Plans	Specific plans for teaching, that designate behavioral objectives, procedures to follow, materials and a section for teacher notes.
VI.	Vocabulary	Lists of vocabulary words are included in each unit. Sometimes these words are developed and listed with each sub-unit, and at other times they are listed only at the end of the entire unit.
VII.	Resources	Accompanying each unit is a list of available resources, both material and human, that can be utilized with the respective unit.
VIII.	Evaluation	A form to be utilized when assessing student performance on specific objectives.

ACKNOWLEDGEMENTS

I wish to especially thank all of the teachers involved in this project, for their tireless efforts and patience as they worked throughout the year. Special thanks to Vanetta Burton, who spent countless hours typing this material into our word processing system. It's amazing that you could keep all of this organized. Special acknowledgement is due Peg Nelson, who assisted in the editing of this material. Without your help this project would have been much more difficult to complete. We all appreciated the contributions made by Dr. Gerald Sullivan and Dr. Paul S. Markovits, who helped make sense out of the language arts and sciences. And, thank you Margaret Brown, Gallatin County Superintendent of Schools, for your cooperation in making this project possible. Thank you all.

We are also indebted to the Northwest Area Foundation, for funding this inservice project. Without your financial support, this project would not have been possible.

W.D.H.

PARTICIPANTS

The following teachers met throughout the 1984/85 school year to participate in the "Rural Schools Integrated Curricula" Project. This inservice project culminated with the development of teaching units on Gallatin History - Past to Present; Oceans; Weather and Outer Space.

Sandy Visser	Amsterdam School
Nancy Drusch	Amsterdam School
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Molly Siddoway-King	Gallatin Gateway School
Lyn Morton	Gallatin Gateway School
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UNIT: GALLATIN HISTORY - PAST TO PRESENT

Grade Levels K-8

Step I. Rationale:

Through the ages human beings have depended upon their past to understand and predict their future. People interacting within their environment through the passage of time, create the history of an area. History not only enriches the students' perception of his/her immediate surroundings but also provides a knowledge base for decision making about the future. It is through the development of this instructional unit, GALLATIN HISTORY - PAST TO PRESENT, that our students will form an appreciation of their culture, heritage, and environment.

Step II. Sub-Units:

Grade	Sub-Units
K-1	Wildlife Shelter
2	Agriculture Ethnic Backgrounds
3	Folk Lore Timber
4	Early Explorers Ranching
5	Railroads Cities & Towns
6	Government Life Styles
7	Ecology Recreation
8	Geography Native Americans
K-8	Education

UNIT: GALLATIN HISTORY: PAST TO PRESENT

Step III. General Objectives

1. To develop an awareness of how geographical features affect students' lives through the use of their environment as a learning laboratory.
2. To provide students with an understanding of the discovery, early exploration, and settlement of our area.
3. To understand the economic development of the rural community.
4. To develop the students' awareness of the wildlife indigenous to our area.
5. To enhance the students' appreciation for the evolution of shelter and its effect on lifestyles.
6. To develop student awareness of the importance of agriculture.
7. To enhance students' understanding of how ethnic characteristics contribute to ones lifestyle.
8. To develop an awareness of the ecosystem and the effect that system has on their lives.
9. To recognize their responsibility, as citizens, to preserve and maintain a natural balance in their environment.
10. To analyze the positive and negative aspects of the various influences on the economy.
11. To analyze lifestyles which develop and change as a result of one's environmental and economic situations.
12. To help students understand the general process involved in group decision making.
13. To comprehend the need for government and how it affects growth and development.
14. To demonstrate an appreciation and to evaluate the changes of our natural surroundings.
15. To enhance students' awareness of early artistic contributions.
16. To develop an awareness of the location and establishment of settlements in response to community needs.
17. To appreciate the role that the development of transporation has played in shaping history.
18. To develop an appreciation of the educational process through a study of the city and rural schools in the valley.

Step IV. Core Activities: Wildlife (Grades K-1)

A. Reading

1. Select various books on topics that relate to wildlife.
2. Read fiction and non-fiction stories of animals.
3. Use animal names to introduce singular and plural word forms.
4. Display various wildlife paraphanalia.
5. Collect and label pictures of various species of wildlife.
6. Introduce words and phrases used in wilderness survival.
7. Use the names of wildlife to determine initial, medial, and final consonant and vowel sounds.

B. Language Arts

1. Write creative stories.
2. Use "show and tell time" to develop the wildlife theme.
3. Develop a list of vocabulary words relating to wildlife.
4. List adjectives that describe aspects of wildlife.
5. Collect and label pictures of various species of wildlife.
6. Introduce words and phrases used in wilderness survival.
7. Use the names of wildlife to determine initial, medial, and final consonant and vowel sounds.

C. Math

1. Create number stories using the names of wildlife animals.
2. Use pictures of animals to develop counting and number recognition skills.
3. Construct a graph to compare animal size and weight.
4. Develop measurement skills using antlers and horns.

D. Science

1. Determine different shelters for different animals.
2. Match various animals to their tracks.
3. Determine different modes of wildlife protection.
4. Match animal mothers to animal babies.
5. Introduce the idea of the food chain.
6. Discuss ways that animals provide food and clothing.
7. Discuss the various ways animals protect themselves.
8. Discuss the eating habits of wildlife.

E. Social Studies

1. List and describe the geographical locations of various animals.
2. Discuss how communities help protect wildlife.
3. Identify and discuss the significance of the state animal.

Step IV. Core Activities: Wildlife (Grades K-1)

F. Art

1. Illustrate animal stories
2. Use clay to sculpt various types of wildlife.
3. Utilize various mediums to create imaginary animals.
4. Construct animal puppets.
5. Create art projects that relate to wildlife.
6. Discuss the ways in which animal bones, teeth, and fur are used for ornamentation.

G. Music

1. Play musical games that relate to the theme of animals.
2. Listen to recordings about animals and animal life.
3. Use animal songs to express sound, rhythm, and beat.
4. Use various forms of music to describe animal movement.
5. Identify melodic characteristics of animals.
6. Discuss the ways in which animal parts can be used in the making of musical instruments.

H. Health and Physical Education

1. Discuss the ways in which humans and wildlife prepare for the change of seasons.
2. Compare the ways humans express emotion to those of wildlife.
3. Discuss the ageing process of animals.
4. Learn how to run, skip, jump, imitating various species of wildlife.
5. Play games that relate to wildlife.
6. Improvise on well known games using animal movement characteristics.

Step IV. Core Activities: Shelter (Grades K-1)

A. Reading

1. Select various books on shelter related topics.
2. Read stories about the various types of shelters.
3. Collect and label pictures of various types of shelters.
4. Use the names of various types of shelters to determine initial, medial, and final consonant and vowel sounds.
5. Use the names of various types of shelters to introduce singular and plural forms of words.

B. Language Arts

1. Write creative stories on the theme of shelter.
2. Use "show and tell time" to develop the shelter theme.
3. Develop a list of vocbulary words relating to shelter.
4. List adjectives that describe aspects of shelters.
5. Present fingerplays and pantomimes relating to shelters.
6. Learn that oral language can be written down and read back through the development of experience stories.
7. Listen to recordings that relate to shelters.

C. Mathematics

1. Have children create number stories using the shelter theme.
2. Compare the sizes of various types of shelters.
3. Use the cost of electricity to develop the students' recognition of the value of money.
4. Recognize the geometric shapes found in various kinds of shelters.

D. Science

1. Determine different shelters used by different animals.
2. Differentiate various forms of energy used for shelters.
3. Compare the different types of machines used in shelters.

E. Social Studies

1. Describe the different types of homes in the Gallatin Valley.
2. Collect the label pictures of different types of shelters.
3. Study the structure and uses of a barn.
4. Construct and label maps of neighborhoods.

F. Art

1. Use various materials to construct different types of shelter.
2. Illustrate stories about the types of shelter.
3. Create art projects that relate to shelter in the Gallatin Valley.

Step IV. Core Activities: Shelters (Grades K-1)

G. Music

1. Play musical games.
2. Sing songs.

H. Health and Physical Education

1. Compare safety factor of shelters.
2. Play games.

Step IV. Core Activities: Agriculture (Grade 2)

A. Reading

1. Read related stories, books, periodicals and histories.
2. Memorize poetry.
3. Develop a vocabulary chart.
4. Read orally to class.
5. Read excerpts from books on farm chores.
6. Practice sequencing activities.
7. Read and interpret recipes.
8. Use experience charts to compare chores of then and now.

B. Language Arts

1. Act out a story.
2. Write class letter to state and national Department of Agriculture for literature.
3. Write an experience chart story.
4. Keep a daily journal of events and knowledge gleaned from the unit.
5. Write creative stories with agricultural themes.
6. Prepare a class book of poetry using agricultural themes.
7. Create and solve word searches and crosswords utilizing agrilcultural vocabulary.
8. Form spelling lists from the vocabulary list.

C. Math

1. Write and work story problems.
2. Classify and categorize farm products.
3. Develop measurement skills using alternate standards of measure.
4. Prepare various recipes using local farm products.
5. Practice counting money.
6. Construct and translate graphs.
7. Compare prices of various farm products.

D. Science

1. Study the five senses.
2. Plant and grow seeds.
3. Study food chains.
4. Identify plants, weeds, crops native to the area.
5. Recognize effects of weather on agriculture.
6. Study and compare a variety of farm animals.

Step IV. Core Activities: Agriculture (Grade 2)

E. Social Studies

1. Compare types and uses of clothing as they relate to agriculture.
2. Investigate types of transportation used to move products.
3. Compare lifestyles of country child and city child.
4. Take field trips.
5. Invite resource people to share their farming lifestyle.
6. View films and movies.

F. Art

1. Make vegetable prints.
2. Dye fabrics with natural dyes - cranberries, spinach, beets.
3. Design seed collages.
4. Make wheat weavings.

G. Music

1. Play musical games.
2. Sing songs.
3. Make musical instruments using farm products.

H. Health and Physical Education

1. Investigate the four food groups.
2. Imitate movement of various farm animals.
3. Dramatize growth of a seed to tall plant.

Step IV. Core Activities: Ethnic Background (Grade 2)

A. Reading

1. Read stories related to ethnic backgrounds (include periodicals and histories).
2. Memorize poetry.
3. Develop a vocabulary chart.
4. Read orally to children.
5. Read and interpret recipes.
6. Practice sequence activities.

B. Language Arts

1. Act out a story.
2. Write an experience chart story.
3. Keep a daily journal of events and knowledge gleaned from the unit.
4. Write creative stories.
5. Prepare a class book of poems using topic theme.
6. Create and solve word searches and crossword puzzles using unit vocabulary.
7. Form spelling lists utilizing the vocabulary list.
8. Learn simple foreign words.
9. Create a foreign language.
10. Write to pen pals in a foreign country.

C. Math

1. Write and work story problems.
2. Prepare various recipes from different ethnic cultures represented in our area.
3. Construct and translate graphs.

D. Science

E. Social Studies

1. Compare types of ethnic clothing.
2. Take field trips.
3. View films and movies.
4. Invite resource people in to tell about their lifestyles.
5. Compare holiday customs and traditions.
6. Prepare and eat foreign foods.
7. Locate countries and learn facts related to unit theme.
8. Compare lifestyle of children in class with children of other countries.
9. Collect artifacts from foreign countries.

Step IV. Core Activities: Ethnic Backgrounds (Grade 2)

F. Art

1. Use ethnic backgrounds to construct art forms associated with that culture.

G. Music

1. Sing songs from different cultures.
2. Make musical instruments considering ethnic backgrounds.

H. Health and Physical Education

1. Learn how to play typical games practiced by children of other ethnic backgrounds.
2. Learn how to perform dances from other cultures.

Step IV. Core Activities: Folklore (Grade 3)

A. Reading

1. Read stories of famous area people.
2. Read stories of area animals.
3. Introduce students to Indian stories and how they relate nature nature to their lives.

B. Language Arts

1. Listen to tapes of early settlers.
2. Interview older area residents.
3. Listen to recordings of legends and myths of the past.
4. Write a play from information derived from interviews.
5. Write thank-you notes to people interviewed.
6. Write poetry from legends or myths.

C. Math

1. Compare today's money system to the bartering system of the past.
2. Compare the buying power of the dollar in 1900 as compared to today.
3. Discover how the standard of measurement was developed.

D. Science

1. Describe the factors necessary for animal survival.
2. Observe and record similarities and differences of animals with respect to size, shape, etc.

E. Social Studies

1. Indicate on a local map the locations of interviewed folk.
2. Develop a calendar of holiday or seasonal traditions derived from interviews.
3. Role play living conditions or situations (learned from interviews).
4. Discuss living conditions and clothing of early settlers.

F. Art

1. Construct art forms (animals) from the native clay.
2. Develop early art projects discovered from the interviews.

G. Music

1. Learn songs from earlier times.
2. Study historical messages from early tunes.

H. Health and Physical Education

1. Learn games from earlier times.
2. Learn Indian hand games.

Step IV. Core Activities: Timber (Grade 3)

A. Reading

1. Read and discuss selected books related to American outdoor heritage such as Paul Bunyan and Johnny Appleseed.
2. Read and discuss selected books on Native American myths related to the forest.
3. Read selected factual books, pamphlets, and articles on the forest.

B. Language Arts

1. Write letters requesting information from local, state, and national forest services.
2. Listen to a guest speaker (forest ranger) talk on the topic of timber.
3. Write poems describing trees.
4. Write creative stories about trees.
5. Write an imaginary conversation you might have with a tree concerning its history.
6. Describe a tree in detail so someone else can recognize it.

C. Math

1. Count the rings of a tree to determine its age.
2. Construct a graph that compares the height of trees to their age.
3. Devise a way to estimate the number of rings on a tree.
4. Write math story problems about trees, wood cutters, animal tree dwellers, etc.
5. Recognize geometric shapes that occur in trees.
6. Measure a tree and its shadow.

D. Science

1. Classify trees according to specific characteristics such as needles, leaves, bark patterns, etc.
2. Analyze and plant pine cones (or other tree seeds) and observe the results.
3. Discuss the dependence animals have on trees as homes and food.
4. Compile a list of trees native to this area.
5. Observe and record the seasonal changes of the trees.
6. Make a chart showing how living things use trees.

E. Social Studies

1. Identify natural resources from which home building materials are derived, distinguishing between renewable and nonrenewable resources.
2. Report on the careers related to the forest or forest products.
3. Demonstrate ways that paper and other natural resources can be used and recycled in the classroom.

Step IV. Core Activities Timber (Grade 3) continued

F. Art

1. Investigate patterns in trees.
2. Discuss nature as a source of art materials and inspiration for people.
3. Investigate the variety of colors that can be obtained from natural materials.

G. Music

1. Make musical instruments from forest products.
2. Listen to various recordings of music related to the forest.

H. Health and Physical Education

1. Describe ways nature can be a source of materials used to play a game.
2. Learn how to play games that involve wood or wood products.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step IV. Core Activities: Early Explorers (Grade 4)

A. Reading

1. Locate various books and/or magazines that relate to area's early explorers and trappers.
2. Read and discuss stories.
3. Read poetry and plays.
4. Listen to recordings (records and/or cassettes).
5. Visit museums to research and report on collections.
6. Visit library using study sheets that guide their research.

B. Language Arts

1. Make a journal entry for a time period describing the life of an early explorer.
2. Write an original poem expressing the isolation of an explorer.
3. Write fictional letters.
4. Write reports on a selected explorer.
5. Develop word searches and crossword puzzles from word banks.

C. Math

1. Compute ages of various explorers.
2. Construct a time-line of various explorers.
3. Discuss profits made from pelts and furs in 1800's.
4. Graph numbers of wildlife sited by Lewis and Clark on their travel through the Gallatin.

D. Science

1. Compare animals and species found in the Gallatin Valley at the time of Lewis and Clark and those found today.
2. Study the process of hide tanning.
3. Study the effects of trapping on the ecosystem.

E. Social Studies

1. Construct maps showing trails established and used by early explorers.
2. Investigate and compile a time-line with reference to early explorers.
3. Construct an early map of Gallatin valley, from the viewpoint of a particular explorer.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step IV. Core Activities: Early Explorers (Grade 4)

F. Art

1. Create a diorama.
2. Make a mobile of animals seen and or caught by early explorers.
3. Design and make flour and salt maps.
4. Construct apple head dolls.

G. Health and Physical Education

1. Study the effects and procedures of hiking.
2. Take a hike.
3. Care of foods in the outdoors.
4. Investigate foods consumed by early explorers.
5. Learn physical fitness techniques in preparation for a John Colter run.
6. Study edible plants available to man.
7. Learn to square dance.

H. Music

1. Listen to recordings of square dance music.
2. Invite a square dance caller in to call a dance.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step IV. Core Activities: Ranching (Grade 4)

A. Reading

1. Read and discuss stories relating to early ranching.
2. Listen to recordings (records/cassettes) of early settlers and ranchers.
3. Visit museums (Bozeman, Helena, etc.) to research and report on their collections.
4. Visit a library, using study sheets to guide research; read magazine articles, periodicals, newspapers, etc.
5. Read journals and diaries of early ranchers.
6. Listen and discuss tapes made by older generation ranchers.

B. Language Arts

1. Make a journal entry for a ______week period pretending you are an early rancher.
2. Write an original poem pertaining to the "aloneness" of the ranch family unit.
3. Write or compose a letter from a rancher's point of view.
4. Write letters, for information, on the history of ranching.
5. Make a word search and/or crossword puzzle using "ranching" vocabulary words.
6. Compose a play about the family life of the early rancher.
7. Construct a geneology of a local settler.

C. Math

1. Compare costs of early ranching (livestock, equipment, machinery, etc.).
2. Compare and graph ranch sizes (early to present day).
3. Develop story problems using costs of early ranching (expenses/profits).
4. Establish simple early grocery story - compute costs, purchases, money change.
5. Develop concept of acreage through measurement techniques.

D. Science

1. Discuss why certain crops were adaptable to Gallatin County - testing seed germination.
2. Study wind generators.
3. Study simple machines and how they relate to early farm equipment.
4. Identify and classify livestock of the early ranchers.
5. Study how irrigation and fertilizing of crops affect production.

Step IV. Core Activities: Ranching (Grade 4)

E. Social Studies

1. Construct a miniature ranch showing comparative sizes of shelters, grazing land, crops, etc.
2. Visit an early homestead site.
3. Invite resource people knowledgeable of early ranching.
4. Construct a map of Montana/valley showing tillable lands.
5. Construct a map showing cattle drives in Montana.

F. Art

1. Construct a diorama of ranch.
2. Make a mural depicting ranch life.
3. Study and design a quilting pattern.
4. Make apple head dolls.
5. Design and make flour and salt maps.
6. Create mobiles.

G. Music

1. Listen to popular Montana themes.
2. Learn square dances, round dances.
3. Research music that was sung on ranches in early 1900's.
4. Make simple musical instruments.
5. Learn songs on recorder.
6. Sing "Oats, Peas, Beans and Barley Grow"
   "My Home's In Montana"
   "Montana" (new theme)
7. Research early musical instruments.

H. Health and Physical Education

1. Learn and practice a variety of dances.
2. Study hiking techniques and safety guidelines.
3. Study care of food in the outdoors.
4. Compare home remedies used by ranchers with today's medicine.
5. Develop physical endurance exercises and practice them.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step IV. Core Activities: Railroads (Grade 5)

A. Reading

1. Research historical accounts pertaining to the railroads.

2. Construct a dictionary using vocabulary (railroad).
    a. word search
    b. crossword puzzle in shape of locomotive
    c. etomology (multiple meanings)
    d. slang idioms
    e. syllables - diacritical markings

3. Read folklore
    a. John Henry
    b. Buffalo Bill
    c. Calamity Jane
    d. Annie Oakly
    e. Jessie James

4. Use card catalogue in finding historical accounts.

B. Language Arts

1. Construct a newspaper using historical accounts of the railroads.
    a. news accounts
    b. editorials
    c. population study - graphs
    d. cartoons

2. Develop proofreading skills.

3. Travel brochure featuring places you could travel to by train.
    a. Calligraphy - use various letter styles to accent key words.
    b. Write captions for pictures and illustrations.
4. Learn and demonstrate note taking skills (See A 1).

C. Math

1. Construct graphs and charts
2. Compute price fares and rates
    a. for passengers
    b. for agricultural products
3. Design and solve story problem
    a. fractions
    b. metric conversion
    c. basic operations
    d. use time schedule
4. Use measurement skills while:
    a. measuring mileage between stations
    b. designing a time schedule
    c. calculating weights of commodities

Step IV. Core Activities: Railroads (Grade 5)

D. Science

1. Recognize use of wildlife as a food supply.
2. Discuss the impact of the railroad on wildlife.
3. Describe how a tunnel is constructed.
4. Report on the various engine types.
    a. fuel
    b. personnel
    c. energy conservation

E. Social Studies

1. Construct maps showing:
    a. local train routes
    b. stations and their names
2. Display various engines and car types.
3. Report on the various ethnic populations.
4. Report on the use of the railroad in bringing people into the area.
5. Take a field trip to Livingston Burlington Railroad.
6. Interview railroad personnel.
7. Construct a tunnel.

F. Art

1. Construct a clay model of an engine.
2. Construct a collage using railroad pictures.
3. Construct a mobile showing various engine types.
4. Paint a western scene showing an aspect of history.

G. Music

1. Learn folk songs
2. Write an original verse

H. Health and Physical Education

1. Play games such as:
    a. drag and tag
    b. tug of war
    c. practice balancing activities

Step IV. Core Activities: Cities and Towns (Grade 5)

A. Reading

1. Research the development of settlements, forts, cities and towns.
2. Research the ghost towns in the area.
3. Distinguish the aspects that involve the death of a town.
4. Read Mark Twain's account of life in a mining camp.
5. Read and interpret graphs and charts showing the economic and/or population growth of a city.
6. Compare newspaper accounts of various cultural highlights (forms of entertainment, past and present).
7. Contrast the various fashions from past and present, using catalogues and old newspapers.

B. Language Arts

1. Assemble a diary of the life of an individual using historical accounts.
2. Contrast correct grammatical form and in complete sentences in a description of a past and present location, individual.
3. Learn and practice proof reading for errors.
4. Give an oral presentation on an aspect of city life as it has changed from past to present.
5. Communicate the changes that a particular occupation has undergone.
6. Demonstrate outlining skills.
7. Understand the differences between a biography and autobiography as pertaining to local individuals.
8. Dramatize a vaudeville.
9. Develop note taking skills.

C. Math

1. Make a scale drawing of a building.
2. Design a floor print.
3. Perform basic computational skills using advertisements from newspapers.
4. Understand and interpret graphs and charts on community growth or decline.
5. Measure distances using city maps.
6. Measure area using city maps.
7. Make change and combine coins in the purchase of items.
8. Design and solve story problems.
   a. compute differences in prices
   b. demonstrate savings of buying in quantity
   c. demonstrate savings on sale items
9. Construct a store emphasising realistic pricing.

Step IV. Core Activities: Cities & Towns (Grade 5)

D. Science

1. Identify migratory animals.
2. Identify animal communities.
3. Classify indigenous and imported plants.
4. Classify plants according to leaves and plant structures.
5. Discuss animal care.
6. Discuss landscaping and city planning.
7. Experiment with electricity.
8. Investigate ways man has affected his environment.

E. Social Studies

1. Locate early settlements.
2. Research the history of Ft. Ellis.
3. Construct a model of Ft. Ellis.
4. Identify and then research the development of various towns in the area.
5. Field trip to the Museum of the Rockies.
6. Field trip to the old jail.
7. Classify the various occupations associated with cities.
8. Construct map of Gallatin County.
    a. locate cities
    b. points of interest
    c. natural resources
9. Field trip to old established residences.

F. Art

1. Construct a window display.
2. Design an advertisement for a city.
3. Draw architecure on sight.
4. Make leaf rubbings collage.
5. Study print making process of an old photograph.
6. Use various media for representation of city scenes.

G. Music

1. Incorporate various movement activities such as walking, marching, skipping, hand clapping.
2. Recognize ethnic contributions through folk dance.

Step IV. Core Activities: Government (Grade 6)

A. Reading

1. Read stories about American Revolution and Constitution.
2. Read and discuss the Gallatin County History.
3. Select various books and/or articles that have to do with government.
4. Study the background of our early government leaders.
5. Utilize the newspaper to gather information concerning current government issues.
6. Develop a scrapbook and catagorize different governmental issues.
7. Research material in an effort to prepare for a debate concerning a current issue.
8. Read about the electoral process.
9. Visit the Museum of the Rockies and learn about early government happenings.
10. Listen to records that describe our governmental process.

B. Language Arts

1. Re-enact an historical governmental event; i.e., dispute for capital city.
2. Write individual "Bill of Rights."
3. Write patriotic poems.
4. Create a progressive class story that describes the development of our present form of government.
5. Memorize (students' choice) a selection that relates to a historical event.
6. Prepare and deliver a speech which explains a particular civic responsibility.
7. Interview and photograph a local government official.
8. Learn how to use and demonstrate knowledge of the Roberts Rules of Order.
9. Observe a jury trial.
10. Keep a journal of local political issues.
11. Listen to local senior citizens as they talk about past history and government.
12. Visit an old jail house.
13. Visit downtown mural and interpret scenes.

C. Math

1. Construct a time line of local government history.
2. Construct a picto-bar graph depicting the growth of governmental offices or positions.
3. Write verbal problems which local government officials might encounter.
4. Compare lawyer fees of the past with the present.
5. Compare the value of the dollar in the 1890's vs the 1900's.
6. Compare the value of land, past and present.
7. Write story problems relating to gold.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step IV. Core Activities: Government (Grade 6)

D. Science

1. Recognize the effects of climate as it affects communication of large groups of people.
2. Determine which resources had an impact on government decisions.
3. Discuss how technology affects community decisions.
4. Predict the impact of science upon government in the year 2000.
5. Analyze the impact of science on agriculture during a given period of time and evaluate that impact as it affected the tax structure and ultimately the structure of government.
6. Develop a model of government, (as students understand it) during its earliest stages and compare that model with today's governmental structure.

E. Social Studies

1. Construct diagrams of governmental structure and compare past with present.
2. Design a graph depicting the population growth of Gallatin County.
3. Select one famous governmental leader from the past and write a formal paper about his life.
4. Create a flow chart that would explain the development of the governmental structure.
5. Research the dispute over the site of the state capitol.
6. Write and deliver an acceptance speech, as if you were to be elected as a county commissioner today.
7. Explain how the geography of the area influenced the governmental structure.

F. Art

1. Recreate this area's influence on the state flag.
2. Duplicate the architecture as used in government structures (past and/or present).
3. Compare the historical architecture with our present day architecture.
4. Sketch a drawing of the old jail and the new jail.
5. Study the early artists of this area.
6. Study how the preserved ghost towns have contributed to our art history.
7. Determine how the government has supported the arts throughout the years.
8. Collect political cartoons and design one of your own.
9. Create a poster that reflects a local historical event, i.e., Centennial, Sweet Pea, etc.

Step IV. Core Activities: Government (Grade 6)

G. Music

1. Create a patriotic song which incorporates our history.
2. Research how government has influenced the music of our area.
3. Trace the history of civic bands, parades etc., and explain their contribution to patriotism.
4. Discuss how music served as a uniting factor throughout our history.
5. Write a song about a political happening.

H. Health and Physical Education

1. Learn typical games played by children during our early history and re-enact those activities. Descibe how the physical condition of its citizens affect government itself.
2. Create a physical game that would describe our present governmental structure.
3. Develop an awareness of how our early non-technical society depended upon the physical fitness of its members. Describe how they maintained this survival ability.
4. Develop a comparable physical fitness program.

Step IV. Core Activities: Lifestyles (Grade 6)

A. Reading

1. Read stories about early pioneers.
   a. how settlement choice affected lifestyle
   b. how lifestyle had to change to meet new environment
2. Read about early cattle drives. (See B.3)
   a. how influence of cowboy changed environment and economic situations
   b. how development of towns centered around needs of cattle drivers
3. Read about development of ranches. (See B.6)
   a. why started?
   b. where?
   c. success or failure - why?
4. Read about development of schools.
   a. impact on development of towns
   b. change in rural community
5. Read literature on impact of white settlements on Native American cultures. (See B.1)
6. Research, outline and report effect of gold discovery on lifestyles. (See B.2;C.7)
7. Study and compare gold rush mania to development of other industries:
   a. mercantiles
   b. schools
   c. churches
   d. lawyers, judges, etc.
   e. bars
8. Read about ghost towns.
   a. use old newspapers
   b. history books

B. Language Arts

1. Write research paper, using multi-paragraph approach, based on A.5.
2. Create a dictionary of terms pertaining to gold mining, A.6.
3. Write journal entries as if child was one of early pioneers - (his/her choice) and first cattle drive had come in, A.2.
4. Use of dictionary in proofreading all reports.
5. Include a bibliography for all reports.
6. Outline responses to A.3.
7. Write instructions on - (sequencing exercise)
   a. how to locate gold
   b. how to pan gold
   c. how to use a sluice
8. Write friendly letter to someone "back home" telling about new environment.
9. Interview old timers.
10. Write thank you letters to old timers, Native American visitors, ethnic group visitors. (See F.10;G.1)
11. Create newspaper as if printed during time period being studies, E.5, E.7, E.8.
12. Write to other rural schools for exchange of histories, E.12.

Step IV. Core Activities: Lifestyles (Grade 6)

C. Math

1. Compare salaries of early professions to salaries today.
2. Spend $100.00 in:
   a. old catalog vs. new catalog
   b. old grocery store vs. modern store
   c. old clothing store vs. modern store
3. Study effect of supply and demand on costs.
4. Write story problems based on $100.00 to spend, Sec. C.2.
5. Study and compare monetary system of Native American and white culture.
6. Graph location of ranches showing land area in relation to production levels.
7. Graph amounts produced by each gold mine, A.6.
8. Create time line illustrating arrival of ethnic groups.
9. Using time line, (C.9) create second time line comparing governmental development with ethnic arrivals.

D. Science

1. Study and compare impact of domestic animals on environment of wild animals.
2. Effect of wild animals on choosing a living site.
3. Study how to find indigenous plants used as human food source.
4. Study how animal feed produces new plants in an area and impact on environment, grazing patterns yield vegetation change.
5. Learn how settlers found suitable food crops for area of settlement referring to crops used in previous homeland.
6. Research development of man's use of machines, make outline to show.
7. Study relationship of geographic location to gold discovery.
8. Research and write report on areas of archeological discoveries in area.

E. Social Studies

1. Identify ties between people's needs and behaviors as reflected in interaction of various lifestyles: Native American included.
2. Study different means of transportation and communication to comprehend need for modernization as lifestyles changed.
3. Use map to locate settlement areas.
4. Research to find why different lifestyles demanded certain geographic areas - result shown in outline. (See E.6)
5. Map Native American settlements and ethnic groups. (See B.11)
6. Map findings in E.4.
7. Make time line showing gold discoveries. (See B.11)
   a. Map areas of gold mining.
8. Research how people's lifestyles and environmental needs dictate need for government. (See B.11)
9. Outline E.8.
10. Write report for E.8.
11. Make time line showing chronological order of development of area.
12. Study history of your school, prepare to exchange with other rural schools. (See B.12)

Step IV. Core Activities: Lifestyles (Grade 6)

F. Art

1. Study to appreciate usage of environmental materials by Native Americans:
    a. dyes
    b. textures
    c. materials
2. Visit museum to observe Native American artifacts.
3. Create artifact using dyes, vegetation, textured materials.
4. Study Native American tipi paintings.
5. Paint design on hide as in tipi.
6. Make clay model maps showing settlements of ethnic groups.
7. Study ethnic art reflecting lifestyles.
8. Make collage depicting early lifestyles of area.
9. Make Native American instruments:
    a. drum
    b. rattles
    c. bones
10. If available, have Native American visit classroom with cultural items used; i.e., medicine bag, bone necklace, etc. (See B.10)

G. Music

1. Learn Native American and ethnic group songs and dances.
2. Have visitors from G.1 groups visit and perform. (See B.10)
3. Play Native American instruments. (F.9)

Step IV. Core Activities: Ecology (Grade 7)

A. Reading

1. Read an example of foreign impact on an environment.
2. Study an environmental impact statement.
3. Select and read various books and periodicals relating to ecology.
4. Read and collect articles from the newspaper that relate to current ecological issues.
5. Research different kinds of pesticides.
6. Read books or articles on animals native to local environment.

B. Language Arts

1. Write an editorial concerning a current ecological issue.
2. Write a poem about an important element of the environment.
3. Improvise a dialogue between the environment and a proposed impact.
4. Develop questions for a panel discussion on an environmental issue.
5. Listen to a panel discussion.
6. Develop and write an environmental impact statement about a specific area.
7. Develop a commerical for television on ecology and act it out.
8. Write a children's book about ecology and illustrate it.
9. Write and administer a survey on a ecological issue.
10. Develop an ecology handbook.

C. Math

1. Estimate approximate number of organisms in a given area.
2. Develop written story problems relating to an ecosystem.
3. Draw a circle graph representing data obtained from a survey.

D. Science

1. Study, identify, and record observations of an ecosystem of a given area.
2. Discover a balance of nature within a given area.
3. Predict the outcome when an outside element is introduced into a specific environment.
4. View a film on man's impact on the environment and discuss.
5. Compare two different ecosystems.
6. Illustrate and label elements of a specific ecosystem.
7. Draw an illustration of a food web.
8. Investigate ways man changes his natural environment.
9. Determine ways of maintaining an ecological balance.
10. Develop a science center on ecology.

Step IV. Core Activities: Ecology (Grade 7)

E. Social Studies

1. Map an ecosystem.
2. Compare and constrast current maps of the area to maps of the past.
3. Evaluate the pros and cons of development and the environment.

F. Art

1. Create a political cartoon concerning an environmental issue.
2. Design a postage stamp with ecology as a theme.
3. Make stationary using native flora.
4. Design a poster about ecology.
5. Make a collage.

G. Music

1. Write lyrics, with an ecological theme.

H. Health and Physical Education

1. Participate in outdoor activities to investigate local ecosystem.
2. Investigate potential health problems due to an imbalance in an ecosystem.

Step IV. Core Activities: Recreation (Grade 7)

A. Reading

1. Read brochures on recreation.
2. Read travel magazines (i.e., MONTANA).
3. Read ads and articles from local newspapers.

B. Language Arts

1. Write letters to Chamber of Commerce and State Department of Tourism for brochures and travel magazines.
2. Compile a list of all the forms of recreation in the area that generate income.
3. Compile list of occupational opportunities in a resort; i.e., Bridger, Big Sky, etc..
4. Prepare questions and interview various prominent citizens of a resort regarding pro's and con's of tourism in the area.
5. Prepare and deliver a debate on the pro's and con's of tourism.
6. Write and deliver ads (t.v., radio, magazines) for a "model resort".
7. Design brochures for "model resort".

C. Mathematics

1. Prepare circle graphs showing the percent of income generated by tourism over a certain number of years.
2. Predict income and expenses for "model resort".
3. Construct floor plans for "model resort".

D. Science

1. Review environmental impact study on recreational land use for "model resort".

E. Social Studies

1. Contact producers of goods and services to do a price comparison of different kinds of recreation.
2. Discuss how recreation discriminates due to economics.
3. Design a "model resort" based on:
   a. their research of the Big Sky or Bridger resorts
   b. a study of the pro's and con's of resort development.

Step IV. Core Activities: Recreation (Grade 7)

F. Art

1. Build an architectural representation of their "model resort" using scale.
2. Design posters, tee shirts, and curios for "model resort".

G. Music

1. Write promotional song for "model resort".
2. Record musical advertisement for "model resort"; i.e., video, radio, etc.

H. Health and Physical Education

1. Study the benefits and kinds of conditioning programs.
2. Participate in general conditioning for different kinds of recreation.
3. Study sports medicine.
4. View films on recreational activities.
5. Take a field trip to a recreation site and participate in specific activities.

Step IV. Core Activities: Geography (Grade 8)

A. Reading

1. Read myths and legends about origins of geographical formations.
2. Use geography textbook to understand local geographic formations.
3. Read magazines and books about Montana weather and land formations.

B. Language Arts

1. Write a news article about a ficticious geographical disaster; must be applicable to the area.
2. Write a detailed description of a specific geographical formation without naming it.
3. Write a myth, legend, tall tale, or poem about a geographical formation.
4. Use letter writing skills.

C. Math

1. Develop and solve a time line of geographical history.
2. Write story problems of measurement, weight, distance, area, volume, etc.
3. Study system of bartering of pelts, gold, etc.
4. Chart animal life observed in various geographic regions. Figure percentages of total observed.

D. Science

1. Visit sites of geographical interest.
2. Invite MSU students to present geographical research findings.
3. Collect a variety of soil types and experiment with plant growth in each.
4. Create a soil and vegetation map of the county.

E. Social Studies

1. Use reference books to study local formations.
2. Using information about soil types, earth changes and other geographic data, choose a site for a dwelling and design one that you would like to live in.
3. Study the effect of land formations on population density.

Step IV. Core Activities: Geography (Grade 8)

F. Arts

1. Create a relief map.
2. Use layers of clay to demonstrate active geology.

G. Music

1. Make a sound effects tape of geographical events. Listen and identify.

H. Health and Physical Education

1. Predict health hazards that might result from a geographical disaster.
2. Compile a list of recreational opportunities and locations.
3. Students give demonstration speeches teaching other students about a specific recreational activity.

Step IV. Core Activities: Native Americans (Grade 8)

A. Reading

1. Read or listen to stories about Native Americans, (excerpts from SACAJAWEA and LEWIS AND CLARK JOURNAL, etc.).
2. Copy excerpts from LEWIS AND CLARK JOURNAL. Distribute and do sequencing activity.
3. Research (read about) Native American tribes.
4. Read about artifacts found locally, dwelling sites, etc.

B. Language Arts

1. Create a display of Native American artifacts and write fact cards for each item on display. (How, when, and why, used).
2. Write a journal entry from Lewis and Clark's points of view, about their contact with Native Americans.
3. Write a research report comparing and contrasting at least two tribes. (Sec. A.1 & 3).
4. Letter writing.

C. Math

1. Write story problems of measurement, weight, distance, area, volume, etc.
2. Study system of bartering of pelts, gold, etc.

D. Science

1. Make and use Native American tools.
2. Study various edible plants that grow locally.

E. Social Studies

1. Map locations of various tribes.
2. Visit historical sights of the Native American cultures.
3. Visit the Museum of the Rockies, Native American exhibit.

F. Arts

1. Study Native American art/craft techniques and create an object using one or more techniques studied.
2. Create replicas of Native American dwellings.

G. Music

1. Invite Native American performers.
2. Study drums; their sounds and symbols.

H. Health and Physical Education

1. Study and learn to play Native American games.
2. Learn a Native American dance.
3. Study historical methods of preserving food.

Step IV. Core Activities: Education (Grades K-8)

A. & B. Reading/Language Arts

1. Read and discuss stories of pioneering school days - (2-8).
2. Read excerpts from periodicals of early educational experiences - (2-8).
3. Read and report on famous women educators in history - (4-8).
4. Write letters to students in remote, rural areas and compare settings - (K-8).
5. Write creative stories about events in the life of rural or city education - (K-8).
6. Listen to recordings of a pioneer teacher.
7. Listen to stories about teachers in literature - (3-8).
8. Compose a class book depicting the history of a rural or city school in the valley - (K-8).
9. Write a story entitled : "Hands that Carried the Spark of Learning," - (4-8).
10. Write a letter of application for a teaching position in the year 1910; 1930; 1950; 1980; 2000 - (5-8).
11. Compare the teacher certification requirements now and 75 years ago - (5-8).
12. Prepare a typical schedule for a classroom including all curricular areas - (K-8).
13. Study various prose and poetry and how they depict educators - (K-8).
14. Write poems about classroom learning experiences entitled, "The Classroom as My Spaceship," - (2-8).
15. Make journal entries of a day's events at school - (K-8).

C. Math

1. Measure the space of a classroom in meters, yards, feet, etc. - (2-8).
2. Plot room plan on graph paper, using inch-square graph paper - (2-8).
3. Predict the growth of education in the valley by plotting a bar graph study over the past 50 years - (7-8).
4. Compare the salaries of educators over the past 75 years - (7-8).
5. Compute percentages of salaries' increases over the past 75 years - (7-8).
6. Count the items in a classroom and record on a pictograph - (K-2).
7. Compute and compare equipment in two or more classrooms - (2-4).
8. Construct a time line of schools built and used in the valley - (K-2).
9. Construct word problems, using various educational situations - (K-8).
10. Compute money story problems, using various educational situations - (K-8).
11. Estimate the cost of textbooks and equipment found in classroom - (4-8).

Step IV. Core Activities: Education (Grades K-8)

D. & E. Science/Social Sciences

1. Study the history of a school in the valley - (K-8).
2. Interview a retired teacher - (K-8).
3. Locate and label the schools on a valley map, including those not in use at the present time - (2-8).
4. Investigate time lines with reference to valley education.
5. Investigate the role of parochial and mission schools and their impact on the educational process in the valley - (7-8).
6. Collect, label and research educational tools for learning past and present - such as slates, horn books, primers, lunch pails, ink wells, computers, etc. - (K-8).
7. Compare the uses of transportation and their effects and influences - (4-8).
8. Dramatize a rural, one-room school house day in the year 1920.
9. List the items that would have to be replaced if a fire destroyed the school - (K-8).

F. Art

1. Utilize various mediums to create models of schools in the valley after researching its history and structure - (K-8).
2. Build, "then and now" diaramas of classroom settings.
3. Create collages of the "3 Rs" and how they affect todays learning - (K-8).
4. Create a classroom of the future.
5. Design safety posters for areas around the classroom.

G. Health and Physical Education

1. Recall games that can be played indoors and outdoors - (K-8).
2. Choose safety rules for classroom behavior - (K-8).
3. Choose safety rules for playground behavior - (K-8).
4. Discuss bicycle safety.
5. Discuss bus safety.
6. Prepare menues for healthy lunches, utilizing the four basic food groups.
7. Prepare healthy snacks during school.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Wildlife - Grades K-1

READING: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT To create an understanding of wildlife vocabulary.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify a word that describes a particular form of wildlife.	1.1 Pick a wildlife animal and give a word that describes: a) color animal; b) size of animal; c) disposition of animal. Record responses on experience chart.	1.1 Experience chart, markers, pictures of animals.	
	1.2 Introduce the idea of simile to children. Record responses on individual sheets of paper and have children illustrate; e.g., graceful as a deer, quick as a fox, etc.	1.2 Construction paper, crayons, drawing materials, etc.	
2. Match names of wildlife to actual pictures of specific animals.	2.1 Create a bulletin board learning center posting pictures of many animals. Include a word-pocket containing a name for each animal. Children match names to pictures.	2.1 Pictures of animals, bulletin board, label words for animals, fastening devices.	
	2.2 Match pictures of animal mothers to animal babies to learn animal baby names.	2.2 ANIMAL BABIES, Gregor, Ylla and Arthur. Animal baby pictures.	
	2.3 Read story ANIMAL BABIES.		
	2.4 Students will play the game, "Animal Bingo." (Write animal names on bingo cards, teacher calls out name and student uses covering device until bingo occurs).	2.4 Animal bingo cards, markers.	
	2.5 Develop a worksheet on which the names of various forms of wildlife have been scrambled. Child will unscramble animal names.	2.5 Worksheet.	
	2.6 Develop a word bank with words pertaining to wildlife.	2.6 Word banks.	

READING: WILDLIFE - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT To develop an appreciation for wildlife through children's literature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Read books pertaining to wildlife.	1.1 Select numerous books and articles on wildlife and display about the room. Have children read books or read them orally to the class.	1.1 Many books on wildlife.	1.1 TAWNY THE MOUNTAIN LION, Leonard, R. WILD ANIMALS I HAVE KNOWN, Seton TEN LITTLE SQUIRRELS, Martin, Bill Jr. THIS LITTLE PIG, Miles, Miska.
	1.2 Children will bring books and articles from home to share with the class on wildlife.	1.2 Display area for books.	

LANGUAGE ARTS: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept that oral language can be written down and read back.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Dictate/write stories, poems and books pertaining to wildlife.	1.1 Have the children select their favorite wild animal and write a story about it. Illustrate the story.	1.1 Writing materials, drawing paper.	
	1.2 Compile stories about wildlife into a class journal.	1.2 Writing materials, etc.	
	1.3 Children will write selections pertaining to wildlife in their individual journals.	1.3 Journals.	
	1.4 Have children write riddles about a particular animal and share with class.	1.4 Book of riddles, writing materials.	
2. Differentiate between real animals and imaginary animals.	2.1 Write stories about real and imaginary animals. Students may even write a story about an imaginary animal's encounter with a real animal. (Pooh Bear meets a grizzly bear).	2.1 Writing materials.	

LANGUAGE ARTS: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop creativity through finger plays, pantomime and show & tell.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn creative expression through pantomime.	1.1 Place pictures or words of animals in container. Each child chooses a word and pantomimes it so the class can guess.	1.1 Container, animals' names or pictures to select from.	
2. Demonstrate creative expression through finger plays.	2.1 The children will recite various finger plays about animals. (Many oldies can be changed to suit theme).	2.1 Finger plays.	
3. Learn creative expression through show & tell.	3.1 Use show & tell time to share information and articles from home about wildlife.	3.1 Show and tell time.	

MATH: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Create ideas for basic facts in verbal math problems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create verbal addition and subtraction problems.	1.1 Have students make verbal math problems using addition facts to twelve.	1.1 Writing materials, objects for counters.	1.1 Large lima beans make great counters.
	1.2 Have students make verbal subtraction problems for facts to twelve.	1.2 Writing materials, objects for counters.	
2. Develop counting skills using manipulatives.	2.1 Display any number of animal pictures. Have the children practice counting skills using the pictures.	2.1 Pictures of wildlife.	2.1 Develop ideas of more than, less than.

MATH: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of a simple bar graph.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a bar graph.	1.1 Discuss what a bar graph is and give an example on the board.	1.1 Blackboard, chalk.	
	1.2 Make a bar graph comparing animal size, (large-small).	1.2 Large graph paper.	1.2 Only have two variables at this time.
	1.3 Make a bar graph comparing animal weight, (heavy-light).	1.3 Large graph paper.	1.3 Only two variables at this initial stage.
	1.4 Make a bar graph comparing antler size.	1.4 Antlers, yardstick, ruler, tape measure, large graph paper, markers.	1.4 Develop the concept of more than/ less than. Develop concept of measurement skills.

SCIENCE: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding that different kinds of animals have different tracks.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Explore animal tracks.	1.1 Take a neighborhood walk to discover various animal tracks.		
	1.2 Match animals to their tracks.	1.2 TRACKS, Elementary Science Study (ESS), McGraw Hill, Teachers' Resource Center, MSU.	1.2 Excellent resource book for additional ideas.
	1.3 Discuss and observe how animal tracks differ.		
	1.4 Have children make footprints of their pets.	1.4 Mud, white paper.	
	1.5 Have children make own footprints. Compare to animal tracks. Discuss, compare and record their observations.	1.5 Finger paint, paper, pie tins, journals.	

SCIENCE: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop sorting, and categorizing skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Categorize animals according to various characteristics.	1.1 Discuss the similarities and differences of animals.		
	1.2 Use the similarities and differences to categorize animals, (have claws, fur, antlers). Record findings on experience chart.	1.2 Experience chart, pens.	1.2 Develop classification skills (mammals, amphibians, reptiles, etc.).
	1.3 Plan animal cracker party. Categorize animals represented, (wild-domestic).	1.3 Animal crackers.	
	1.4 Eat the animals.	1.4 Animal crackers.	1.4 By eating certain animals, the students could then act out the animal they ate. Can others tell what it is?

SCIENCE: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of animal shelters.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss idea that nature furnishes shelter for animal.	1.1 Discuss animal shelters.		1.1 Fox den, bear cave.
	1.2 Set up interest center displaying animal homes.		1.2 Bird nest, beehive.
	1.3 Collect pictures of animal homes for bulletin board display. Have children match pictures of animals to their shelter, then explain why this is a good shelter for this animal.	1.3 Animal pictures/shelter.	1.3 Develop concept through use of a matching activity worksheet.

SOCIAL STUDIES: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding that many types of wildlife have become extinct.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. State what endangered animals are, both in name and why they are endangered.	1.1 Have the children make a "Save the Animals" poster.	1.1 Tag board, markers, crayons, paints, stencils for lettering.	
	1.2 Display the posters around the school building.		
	1.3 Group discussion in which students are asked to state the name of an endangered animal and also one reason why it has become endangered.		

SOCIAL STUDIES: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of wildlife protection.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss necessity of wildlife protection laws.	1.1 Generate class discussion on the value of wildlife laws.		
	1.2 A wildlife biologist from Fish and Game Department will explain wildlife conservation in our area.	1.2 Wildlife biologist from Fish and Game Dept.	
	1.3 Initiate a school wide conservation campaign.	1.3 Smokey the Bear, Woodsy Owl - Forest Service.	1.3 Use available posters from government agencies to stimulate ideas for students original posters. Develop concept of fire safety and prevention.

ART: WILDLIFE - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Provide learning experiences about animals and their babies.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss the kinds of things some animal babies may learn from their mothers.	1.1 Read ANIMAL BABIES, discuss story.	1.1 ANIMAL BABIES, Gregor, Yila and Arthur.	
2. Create 3-dimensional animal mothers and babies.	2.1 Make stand up animal mothers and babies on oaktag. Make appropriate backgrounds for these stand up animals in box dioramas. (Meadow/rabbit, tree/raccoon etc.)	2.1 Tag board, crayons, markers, paints, construction paper, scrap materials, shoe boxes.	

ART: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop imagination through creating imaginary animals.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create imaginary animals using different mediums.	1.1 The students will construct wildlife animals from recycled objects.	1.1 Recycled items: toilet paper rolls, egg cartons, etc.	
	1.2 Have each child construct an animal using clay.	1.2 Clay, embossing objects like nails, pencils, paperclips, knife, paints.	
	1.3 Have each child create an egg carton animal.	1.3 Egg cartons, scissors, glue, paint, brushes.	

ART: WILDLIFE - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Develop creativity by constructing animal puppets.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create puppets using various materials.	1.1 Have the children make hand sock puppets of their favorite wildlife animal.	1.1 Socks, buttons, construction paper, tag board, felt scraps, pipe cleaners, yarn.	
	1.2 Using the puppets, have the children demonstrate movement of that animal to the class.		
	1.3 Have children make paper bag puppets of an animal. Have the children write a play involving all the paper bag puppets.	1.3 Small paper bags, markers, scraps of construction paper, yarn.	

MUSIC: WILDLIFE - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Develop imagination through musical experience.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to a musical recording and pantomime the animal the music brought to mind.	1.1 Have the children listen to the recordings of Saint-Saens, "The Carnival of the Animals." Discuss the different animals which come to mind. 1.2 Children may act out the animals the music brought to mind.	1.1 Saint-Saens "The Carnival of the Animals," "Peter and the Wolf," "The Nutcracker Suite."	

MUSIC: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Stimulate creativity through music.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to a song and rewrite the lyrics.	1.1 Have the children listen to "Old MacDonald." Using the melody and cumulative refrain, have the children change the lyrics and build a new kind of farm, (on this farm, he had a bear).	1.1 Record - "Old MacDonald."	

MUSIC: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Experience a musical activity.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Participate in a group musical activity.	1.1 Have the children play, "A Hunting We Will Go."	1.1 Record - "A Hunting We Will Go."	
	1.2 Have the children make up their own verses. Change the phrase "catch a little fox" to include other animal names.		

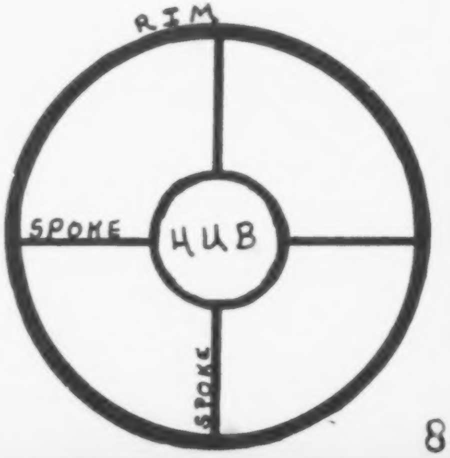
MUSIC: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop listening skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to animal records.	1.1 Have the children listen to recordings about different kinds of animals.	1.1 Records: JUNGLE BOOK, DUMBO, WINNIE THE POOH AND THE BLUSTERY DAY, WINNIE THE POOH AND TIGGER.	
2. Express the rhythm and beat of the songs.	2.1 Using rhythm instruments have the children express the rhythm and beat of the songs.	2.1 Rhythm band instruments.	

MUSIC: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Participation in musical activity.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Sing songs about animals.	1.1 Have the children learn and sing animal songs.	1.1 THE 1ST GRADE BOOK, (Ginn & Co.), "Teddy Bear," "High Stepping Horses." THE WALT DISNEY SONG BOOK, "Who's Afraid of the Big Bad Wolf?", "The Bare Necessities," JUNGLE BOOK. "Animal Fair," "Teddy Bear's Picnic," "The Bear Went Over the Mountain," "Noah's Ark/ Walk in the Forest," "Home on the Range."	

HEALTH AND PHYSCIAL EDUCATION: WILDLIFE - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Experience and learn various games to enhance students large muscle control.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop large muscle control through participation in games and activities related to the wildlife theme.	1.1 Initiate a game of follow the leader. Imitate the way various animals move.	1.1 Large area/gym for game playing.	1.1 Discuss various ways in which animals might move as an introduction to the lesson.
	1.2 Initiate a game of red light/green light. Instead of having children walk or run, have them slither like a snake, hop like a rabbit, gallop like a buffalo, scurry like a mouse, etc.	1.2 Large play area/gym.	
	1.3 Use packing boxes or barrels on the playground. Children can then use them for various types of animal homes. They could pretend to be bears in dens, foxes in dens, etc. Using characteristic movements of that animal during play.	1.3 Packing boxes and barrels, large play area.	1.3 This could be used as an introductory experience for a creative writing assignment.
	1.4 Initiate a game of squirrels in trees. Children count off by 3's, numbers 1-2 are trees and hold hands as partners facing each other. Number 3's are squirrels and stand in the middle. When teacher blows whistle all squirrels change places. Squirrel without a tree gets to choose his position.	1.4 Large play area	
	1.5 Initiate a game of Fox and Geese. One child is fox, all others are geese. Geese are only safe when in hub of wheel, when a goose is tagged, he automatically becomes the fox. Children can only run on the rim or spokes of the wheel.	1.5 Large playing area, preferably with snow to make tracks.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Shelter - Grades K-1

READING: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Create an understanding of shelter vocabulary.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify words that pertain to shelter.	1.1 Use flashcards with shelter vocabulary words for children to read and discuss meaning.	1.1 Flashcards with shelter vocabulary words.	
	1.2 Discuss the meaning of a synonym and list synonyms for shelter vocabulary words; e.g., street, road, avenue.	1.2 Blackboard, chalk.	

READING: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation for shelters through children's literature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Read books pertaining to shelter.	1.1 Select numerous books and articles and place about the room. Have children read books or read them orally to the class.	1.1 Many books about various kinds of shelter.	1.1 A barn is a shelter. A HOUSE IS A HOUSE FOR ME, Hoberman, Mary Ann, Viking Press NEED A HOUSE? CALL MS. MOUSE, Mendoza, George, Grossett Publishers IN A PEOPLE HOUSE, Sieg, Theodore, Le, Random House GRANDPA'S BARN - FINGER AND ACTION RHYMES, McGuire, MaBelle.
	1.2 Children will bring books and articles from home to share with the class on shelters.	1.2 Display area for books.	

READING: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop concept of shelter through children's literature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to a story and discuss why family groups need homes.	1.1 Read the story, "Goldilocks and the Three Bears."	1.1 Story, "Goldilocks and the Three Bears."	1.1 Ask comprehension questions.
	1.2 Discuss the concept that family groups need homes.		
2. Discuss and write about the uniqueness of their own home.	2.1 Have each child bring a picture of their home. Display pictures. Have each child label their picture with descriptive phrases, then explain the phrases if asked to.		
	2.2 Have the children write a story about their own home using their adjective phrases from the bulletin board.		
	2.3 Illustrate the stories by drawing a picture of their own home and family.	2.3 Drawing paper, crayons, construction paper.	
3. Collect newspaper articles and pictures about shelter.	3.1 Have the children collect articles from the newspaper and share with class.	3.1 Newspapers.	3.1 Placing these pictures and articles on a bulletin board is one way to make a display.

LANGUAGE ARTS: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Use creative writing to learn about animal shelters.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a creative story.	1.1 Have the children write a story about visiting their favorite animal's home.	1.1 Writing paper, pencils.	1.1 Stress punctuation skills.
	1.2 Have them describe an overnight visit.		
	1.3 Illustrate the stories.	1.3 Paper, crayons, markers.	
2. Compare animal shelters and discuss the similarities and differences.	2.1 Display pictures of two different animal shelters, (i.e. bear's cave/ bird's nest). List the similarities and differences.	2.1 Experience, chart paper, pictures of animal shelters.	
3. Develop a home improvement plan for their favorite animal.	3.1 Display pictures of animals in their homes. Discuss how an animal home could be improved.	3.1 Animal and animal shelter pictures.	
	3.2 Have each child design a home improvement play for their favorite animal; i.e., sink - raccoon.	3.2 Drawing paper, crayons.	

MATH: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Practice basic facts in verbal math problems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create verbal math problems using their families and homes as a theme.	1.1 Have students make verbal math problems using addition facts to twelve.	1.1 Writing materials, objects for counters.	
	1.2 Have students make verbal subtraction problems for facts from twelve.	1.2 Writing materials, objects for counters.	

MATH: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of geometric figures by observing different shapes of houses.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Compare the different shapes of houses to geometric figures.	1.1 Prepare a worksheet with simple drawings of houses. Also include some basic geometric figures for comparison. Have children match the geometric figure to the shape of each house.	1.1 Worksheets with simple drawings of houses and geometric figures.	

MATH: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Provide practice in measurement skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Measure various objects (linear).	1.1 Discuss the school as a shelter. Measure the length and width of the classroom using children's feet, yardsticks, books, paper clips. Record results.	1.1 Measuring tools, books, paper clips, paper.	1.1 Develop concept of why we use different units of measure for different purposes (we don't measure distances between cities in inches).

MATH: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of a simple bar graph.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a bar graph to determine which type of shelter is most lived in.	1.1 Discuss what a bar graph is and give an example on the board.	1.1 Blackboard, chalk.	
	1.2 Create a chart with columns headed: House, Apartment, Mobile Home, Other.	1.2 Duplicated hand-out sheets with column headings.	
	1.3 Children will respond and a count taken of types of shelters they live in.		
	1.4 Paste construction paper squares in the appropriate columns and use this graph to determine which kind of shelter most of the children live in.	1.4 Construction paper, glue.	1.4 Each child has a piece of construction paper to glue on the graph. Before any are glued on they are all asked to hold up their piece and it is made clear that everyone only has one piece to glue on. Note: Once the graph is made, problems can be created; i.e., how many more live in a mobile home than an apartment, etc.

SCIENCE: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of animal shelters.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss how nature furnishes shelter for animals.	1.1 Discuss animal shelters.		1.1 Fox den, bear cave.
	1.2 Set up interest center displaying animal homes.		1.2 Bird nest, bee hive.
	1.3 Collect pictures of animal homes for bulletin board display. Have children match pictures of animals to their shelters, and then explain why the shelter matches the animal.	1.3 Animal pictures/shelter.	1.3 Develop concept through use of a matching activity worksheet.

SCIENCE: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the various kinds of shelters.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss how people everywhere are alike in their need for shelter.	1.1 Use the poem "Home" to introduce lesson.		1.1 "HOME" A whale in the ocean, A bird in its nest, A bee in its beehive Are all home to rest. But people are people; They choose what they may, And one big decision's The place where they stay. The place becomes home For the family in it, And love makes it greater From minute to minute.
	1.2 Initiate a class discussion on the various kinds of shelters.		
	1.3 Cut out pictures of many kinds of shelter and make a class collage.	1.3 Magazine pictures, poster board, glue.	
	1.4 Have children create a picture of what kind of a shelter a child from a foreign country would live in.	1.4 Drawing paper, crayons.	
	1.5 Discuss the various pictures drawn and look for similar features.		

SOCIAL STUDIES: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Develop concept that houses of today differ from those of long ago.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss similarities and differences of shelter.	1.1 Display pictures of present day houses and houses of long ago. Discuss the similarities and differences of the shelters.	1.1 Pictures of homes.	1.1 Self-guided historical homes tour. Pamphlets are available from the Chamber of Commerce; John DeHaas, (see Resource List); visit Museum of the Rockies to view changes in life styles over the years.
	1.2 Discuss the differences in kinds of materials used to build homes past to present.		
2. The children will classify types of shelter by specified attribute.	2.1 Categorize houses according to the materials they are made of.	2.1 Experience chart.	2.1 Develop the idea that people of today no longer have to build homes out of materials found close by.

SOCIAL STUDIES: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop map skills through the use of a neighborhood map.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Label a map of the school neighborhood with appropriate street names.	1.1 Display a map of the neighborhood in which the school is located. Show the school and various other landmarks in the neighborhood. Have children label and locate various landmarks in the area.	1.1 Map of school neighborhood.	
	1.2 Take a field trip of the school's neighborhood area and record the names of the streets. Record any landmarks that may have been missed on classroom map.		
	1.3 Label classroom map with the appropriate names of surrounding streets.	1.3 Classroom map of neighborhood, labeling materials.	
	1.4 Play a game with the class. (If you walked out of the front door and turned to your left and walked two blocks, what would you see?) Record answers on chalkboard.	1.4 Classroom map, chalkboard	
	1.5 Develop a worksheet with a map similar to the one in 1.1. Have students label streets and landmarks in school neighborhood.	1.5 Map worksheet.	

SOCIAL STUDIES: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop map skills through the use of a neighborhood map (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
2. Label and define direction on a map.	2.1 Using the neighborhood map already developed, add the additional dimension of direction. Play a game with the children, ("If you go so many blocks north and so many blocks east on _____ street, where will you end up?").	2.1 Neighborhood map, labeling materials.	2.1 Stress directions.
	2.2 Introduce a map of a larger area or city to the class. Locate familiar buildings, landmarks, etc. Have students locate their own homes on map.	2.2 Map of larger area, including school neighborhood.	
	2.3 Play same game as described in 2.1, using larger map.	2.3 See 2.2.	

ART: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunity for artistic expression.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create picture on the theme: "What I Like to do Best in My Home."	1.1 Discuss things we like to do best in our "shelter."		
	1.2 List these on the board.	1.2 Blackboard, chalk.	
	1.3 Children will draw and color a picture on what they like to do best in their home.	1.3 Drawing paper, crayons, pencils.	
	1.4 Display pictures on an art bulletin board.	1.4 Bulletin board.	

ART: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop imagination through creating a "mock city."

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create a "mock city."	1.1 Children will construct a "mock city" from recycled objects.	1.1 Recycled items: toilet paper rolls, boxes of various sizes, glue, paint, brushes.	1.1 Explain process of imagination as an extension of an idea we can already picture. (Fantasy based on reality).
	1.2 Glue objects to make buildings of various sizes and shapes, let dry.		
	1.3 Paint to resemble various shelters found in a city.		

ART: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Create crude forms and simple detail.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create simple shelters to gain an understanding of early American life.	1.1 Have children make their shelters using playdough.	1.1 Playdough or other dough, wax paper, rolling pins.	1.1 For storage, wrap dough in damp cloth or keep in plastic bag.
	1.2 Dough is rolled out on wax paper sheet.		
	1.3 Details are put into the dough using tongue depressors, wooden hammers, and other caving tools.	1.3 Tongue depressors, wooden hammers and other carving tools.	
	1.4 Display children's creations on a table in the classroom.	1.4 Display table.	

ART: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Provide an opportunity for artistic expression through sculpture.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create a sculpted shelter.	1.1 Sculpt a balsa wood shelter.	1.1 Balsa wood strips 1/16" thick, scissors, cardboard or wood, block of styrofoam, glue.	
	1.2 Glue styrofoam to cardboard or wood to form a base for sculpture.		
	1.3 Cut out shapes in balsa wood, glue areas together and let dry.		1.3 Some instruction will need to be given on cutting balsa.
	1.4 Mount on styrofoam base.		1.4 For variation, build up layers of balsa wood for a 3-D effect.

MUSIC: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop imagination through musical experience.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create words for music melodies.	1.1 Have children write "animal shelter" lyrics to familiar tunes.	1.1 Paper, pencil, musical instrument if available.	
	1.2 Tape record the original songs that are created by the children.	1.2 Tape recorder.	
2. Enhance movement skills through listening to music.	2.1 Play some different musical pieces on a tape recorder. Ask children how many ways they can roll, swing, crawl or jump to the music.	2.1 Tape recorder or record player, music for moving.	

MUSIC: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop listening skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to a song about homes.	1.1 Have the children listen to a recording about shelter.	1.1 JUNGLE BOOK, "My Own Home" (JUNGLE BOOK Theme).	
	1.2 Ask children some questions from the song they listened to.		

HEALTH AND PHYSICAL EDUCATION: SHELTER - GRADES K-1
ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of safety precautions with regard to fire prevention.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Verbalize the basic principles of fire safety in the home.	1.1 Initiate a discussion of the dangers of fire. Use an experience chart to write down children's responses.	1.1 Experience chart.	1.1 FIRE ENGINES, good read-aloud or look-at-together book for introductory activity.
	1.2 Invite a member of local fire department to come to speak to children about fire safety in the home.	1.2 Guest speaker.	
	1.3 Use experience chart to write additional information assimilated through the visit of guest speaker.	1.3 Experience chart.	
	1.4 Visit local fire department to see equipment used in fighting home fires.	1.4 Local fire department, transportation.	
	1.5 Students will generate a list of fire safety rules for the home (in a group setting).		
2. Discuss basic rules of individual responsibility for the protection of wildlife shelter from fire.	2.1 Initiate a discussion on various types of animal shelter, focus in on wild animals.		
	2.2 Read the story of Smokey the Bear.	2.2 THE STORY OF SMOKEY THE BEAR.	2.2 Contact local forest service if this story is not in school library.
	2.3 Invite Smokey the Bear to class as guest speaker.	2.3 Guest Speaker - Smokey the Bear.	2.3 Contact Dist. Ranger of Forest Service.
	2.4 Discuss and summarize basic rules for fire prevention in the forest through class discussion. Write on experience chart.	2.4 Experience chart.	

HEALTH AND PHYSICAL EDUCATION: SHELTER - GRADES K-1

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of clothing as a form of shelter.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss the ways in which clothing is used to protect us from forces in the environment.	1.1 Use experience chart, divide into sections. Label each section with the name of a season. Initiate a discussion and list the various types of clothing worn in each season.	1.1 Experience chart.	
	1.2 Have various pieces of clothing displayed in the room or at an interest center. Discuss and sort articles according to the season in which they are worn. Various fabric samples should also be displayed about the room. They too should be sorted according to season. Have children feel fabric and discuss qualities of each.	1.2 Various articles of clothing. Various fabric swatches or samples.	
	1.3 Use experience chart from 1.1 to initiate a discussion on winter clothing. Use clothing and fabrics from 1.2 to label and name these types of fabric/clothing that keep us warm in winter. Introduce the vocabulary word "hypothermia." Discuss and list warning signs.	1.3 Clothing/fabric from 1.2 experience chart.	
	1.4 Use experience chart from 1.1 and clothing/fabrics from 1.2 to initiate a discussion of summer apparel. Introduce the vocabulary word "heat exhaustion." List warning signs and precautions.	1.4 Clothing/fabric from 1.2 and experience chart.	

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of clothing as a form of shelter (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
	1.5 Have children use fabric scraps to dress a boy/girl, drawn on construction paper in clothing suitable for the summer season. Do the same for the winter season. Label the fabrics used if possible. (Students cut clothing from scraps and paste on figures on paper).	1.5 Construction paper, drawing materials, fabric scraps, glue, scissors.	1.5 These scraps can be pasted on the outline of a actual size child from class. Have a boy lay down on butcher paper, outline, then cut out. Have a girl do the same thing. Each can be "dressed" in clothes from different seasons, with a culminating language arts application. Create a chart story for each; i.e., the boy is wearing wool clothes. They keep him warm in the winter, etc.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Agriculture - Grade 2

MATH: AGRICULTURE - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Provide practical math experiences that focus on application.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write and work each others story problems related to agriculture.	1.1 Write story problems to be put into a card file. Problems to be worked through duration of unit at the end of class period or free time.	1.1 Cards, card file.	1.1 Teacher checks each problem before entering into file.
2. Use alternate standards of measurement.	2.1 Use an agriculturally related product to measure objects in the room; i.e. beans, corn cobs, etc.	2.1 Objects to measure: beans, corn, wheat, tractor parts, anything farm related.	
3. Become aware of the need for a standard unit of measurement.	3.1 Children will measure same object with different forms of measurement, (beans, corn, etc.). Teacher leads a discussion on the need for a standard unit of measurement.	3.1 Same as above.	
	3.2 Teacher introduces standard measurement forms. Children practice using rulers and yardsticks and compare results.	3.2 Rulers, yardsticks.	3.2 Have some results if they measured properly.
4. Will count money and make change.	4.1 Set up play store selling farm products. Children buy and sell products from store.	4.1 Empty product containers, play money (or real), area for store.	

READING: AGRICULTURE - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of agriculture.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define agriculture.	1.1 Read a story orally about farm life and/or view film.	1.1 THE FARM, Humphry, Miles. THE FARM, Solveig, Paulson Russell. THE FARM BOOK, Roth, Charles E., Froehlich, R. Joseph. Films: ADVENTURES OF TWO LITTLE GOATS, 0339. BIG RED BARN, 0134. FRISKY THE CALF, 0338.	1.1 Bring in variety of books and magazines for children to read for duration of unit.
	1.2 Conduct a discussion about different aspects of farm life.		
	1.3 Formulate a chart summarizing what has been learned from books, films and discussion. Formulate a class definition of agriculture.		
	1.4 Start an ongoing vocabulary chart to be utilized for duration of unit.	1.4 Flip chart, markers.	
2. Read words naming farm animals.	2.1 List names on chart as children name the kinds of animals.	2.1 Flip chart, markers.	
	2.2 Children read orally, formulating list of animals.		
3. Read a list of various plants and crops native to area.	3.1 List on chart as children tell the kinds they learned from speakers.	3.1 Chart, markers.	3.1 See: Science: Agriculture - Grade 2, p. 1, Objective 1, Activity 1.1.
4. Recite a poem about agriculture.	4.1 Read a variety of poems orally and have children choose one to memorize and recite to class.	4.1 "Mother Goose Nursery Rhymes"; "Home Book of Verse for Young Folks," public library.	
5. Read orally poems and creative stories.	5.1 Read poems and stories created by children to another class.		5.1 See: Language Arts: Agriculture - Grade 2, Objective 4 & 5.

LANGUAGE ARTS: AGRICULTURE - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Develop the ability to express thoughts in writing.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Solve a word search or crossword puzzle using words from our vocabulary chart.	1.1 Give students a prepared word search or crossword puzzle to solve.	1.1 Teacher prepared word search.	
2. Compose a class letter to the State Department of Agriculture, requesting pertinent information.	2.1 Write a class letter on chart. Assign student to write in final copy.	2.1 Paper, chart, marker.	
3. Record independently what has been learned in the unit.	3.1 Teacher explains journal format and expectations.	3.1 Journal.	
	3.2 Students make daily entries in journal.		
4. Write thank you notes.	4.1 Students write thank you notes to various resource people you have had during unit.	4.1 Paper.	
5. Write poems about agriculture.	5.1 Write cinquains. Children develop word lists and then they independently choose words from that list to form their own poems.	5.1 Chart paper for word lists.	
	5.2 Make a class booklet of student created poems. Children design own covers.		5.2 See: Art: Agriculture - Grade 2, p. 3, Objective 4.
6. Write creative stories that are farm related.	6.1 Children choose a pre-mounted farm picture and write a story to go with it.	6.1 Agriculture related pictures laminated and mounted by teacher. Writing paper.	

ASSIGN. SCOPE OF LESSON STATEMENT Develop the ability to express thoughts in writing (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
7. Spell words off vocabulary list from unit.	7.1 See Experience Chart.		7.1 See: Language Arts - Agriculture Grade 2, p. 1, Objective 1.
8. Write an alphabet book.	8.1 Children think of animals or agriculture crops to represent each letter of the alphabet. Assign each child specific letters. They think of a crop or animals to go with letter. Write a little background to go with it; i.e., cow - a female animal from which we get beef and clothing. Children illustrate their own letters. Compile into class book.		

SCIENCE: AGRICULTURE - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of plant life and its importance to our area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify various plants and crops native to the area.	1.1 Have a guest speaker give a talk or demonstration on plants in Gallatin County.	1.1 Speaker (farmer, college professor, County Extension Agent, Terry Wolfe).	1.1 Teacher pick a few you want covered - wheat, barley, sunflower, harmful weeds - leafy spurge, thistle, dandilions, etc.
	1.2 Teacher brings in plants covered from above lesson. Children take a closer look at them. Discuss in more detail than speaker about the harmful weeds. Have children identify plants out of a "crowd."	1.2 Plants you choose to study.	1.2 If you bring in harmful weeds such as leafy spurge, be sure to dispose of them carefully so as not to let the seeds get in ground and multiply, flush them.
	1.3 Take a walking field trip and have children identify plants and crops in natural setting.	1.3 Bear Canyon, MSU foothills (Kirk Hill on South 19th & Hyalite).	
2. Plant and grow seeds native to the area.	2.1 Have a variety of seeds to choose from. Children choose seeds and plant them in indoor pots. They are responsible for the care of plants.	2.1 Seeds, pots or milk cartons. Seeds could be squash, wheat, carrot, radish, pumpkin for Halloween, beans, etc. Movie (Willson School): GARDEN PLANTS AND HOW THEY GROW, 0100.	2.1 16mm movie - WHAT DO SEEDS DO?, MP 0951 See resource list at end of section.
3. Writes down what is needed to grow healthy plants.	3.1 Experiment with various plants by not watering one, giving one alot of water, keeping one from sunlight, etc. Children should observe and record results. Teacher leads discussion on what can we conclude conclude or what do plants need to grow.		3.1 Use the same kind of plant for each experiment. See resource list of 16mm films located at end of 2nd grade section, (Plant Life films).
	3.2 Children design a class booklet on what a plant needs to grow. Illustrate with pictures and words. Can include in booklet various stages of plant growth (sequence).	3.2 Colored construction paper, crayons or markers, pencils.	3.2 Class can donate a copy of booklet to kindergarten class.

SCIENCE: AGRICULTURE - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of plant life and its importance to our area (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
4. Recognizes the effects of weather on agriculture.	4.1 Start by discussing various kinds of weather and what we do in that weather: rain, snow, hail, sleet, cold, hot, wind, etc. What times of year does this weather most often occur.	4.1 Chart paper.	4.1 See resource list of 16mm films at end of 2nd grade section (weather science).
	4.2 Start a weather calendar. Children observe weather each day and illustrate a picture on a calendar. Include temperature if a thermometer is available.	4.2 Large calendar or each child can have his/her own desk size calendar.	
	4.3 Experiment with plants grown in Objective 3. Put plants in warm area and cold area and observe results.	4.3 Plants from Objective 3.	4.3 See: Science: Agriculture - Grade 2, p. 2, Objective 3.
	4.4 Study wind and water erosion. Blow a fan on a planted area (potted plants) and a non-planted area. Observe effects of both and discuss it. Do the same with water erosion.	4.4 Fan, soil with plants in it and without	
	4.5 Have a farmer or rancher come in and talk about erosion and the effects of over grazing on the land. Why he plants what he does in certain areas.	4.5 Agriculture representative from bank can put you in touch with a farmer.	4.5 See resource list
	4.6 Farmer can also discuss types of irrigating and how it works.	4.6 Have a new guest speaker.	4.6 Have talk on another day to avoid restlessness from children.

SOCIAL STUDIES: AGRICULTURE - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Create an awareness of the impact agriculture has on everyday life.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will differentiate lifestyles of city children and country children.	1.1 Invite a child from a city and a child from a farm into the room to discuss their lifestyle (free time activities daily schedule, etc.).	1.1 City child, farm child View films (Willson School): COUNTY FAIR, MP0610 DAY AT THE FAIR, 0114.	1.1 Teacher formulate specific questions to ask each child.
	1.2 Record findings on experience chart.	1.2 Chart, pen.	
2. See how different types of clothing relates to agriculture.	2.1 Discuss types of fabrics and where they come from.	2.1 Encyclopedia.	
	2.2 Children make chart pasting on fabric swatches then matching them to picture of animal or plant.	2.2 Fabric swatches, pictures of animals or plants either drawn by children or teacher found.	
3. Tell how farm products are transported to market	3.1 Invite a farmer into the room to tell about how his animals and grains, etc., are transported to market.	3.1 Local farmer/s.	3.1 Bring books into room on transportation; i.e., FOOD FROM FARM TO HOME, Buehr, Walter.
	3.2 Children draw a chart tracing a farm product from farm to market.	3.2 Large construction paper, markers.	
4. See a farm product from its origin to finished product.	4.1 Field trip to Darigold, Bozeman or Cheese Factory, Gallatin Gateway.	4.1 View film (Willson School): SHEEP SHEARING & SPINNING - A STORY OF WOOL, 0554.	
	4.2 Add to vocabulary list		4.2 See: Reading: Agriculture - Grade 2, p. 2, Objective 4.
	4.3 After taking trip, students make a poster showing the processes involved in a product going from origin to finished product.	4.3 12" x 18" construction paper, crayons.	
	4.4 Write class thank you note to place visited, restating what was learned.	4.4 Chart paper, marker.	4.4 See: Language Arts: Agriculture - Grade 2, p. 1, Objective 4.

SOCIAL STUDIES: AGRICULTURE - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Create an awareness of the impact agriculture has on everyday life (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
5. View farm animals and learn what is involved in raising them.	5.1 Field trip to Montana Winter Fair, going to the barns and talking with owners of animals.		5.1 Great to go when there are 4-H boys and girls there.
	5.2 Write observations on experience chart.	5.2 Chart, markers.	
6. Follow directions.	6.1 Make bread.	6.1 Bread ingredients and utensils	6.1 Allow whole day and continue with regular activities. Follow up of Darigold fieldtrip.
	6.2 Make butter.	6.2 Baby food jars and each make own or work in partners; cream RECIPE: whipping cream, baby food jars, salt (optional). Fill jar half way with cream. Shake until it thickens. Pour off liquid and rinse. Add salt.	

ART: AGRICULTURE - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Provide an opportunity for artistic expression.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Make vegetable/fruit printings on a variety of materials.	1.1 Children will carve various fruits and vegetables and make prints on cloth or paper by dipping in paints and applying to surfaces of chosen materials.	1.1 Butcher or construction paper, material (cloth), variety of fruits and vegetables, plastic knives to carve with, tempra paint.	
2. Dye material with natural dyes.	2.1 Children will make various colors of dye in which to dye material. Dip material into dyes and let it soak. Remove and let it dry.	2.1 DYES (do not use a lot of water): Beet juice - boil beets Spinach leaves - boil in water Cranberry juice - boil in water Walnut shells - boil in water Carrot tops - boil in water Set dye with mordent.	
	2.2 Children make something out of dyed cloth; i.e., braid strips together. Make a collective weaving of strips of material for a wall hanging. Sew pencil bags or draw string bags.	2.2 Dyed material, scissors, thread.	
3. Design own seed collage.	3.1 Children will work independently to make a seed collage on paper.	3.1 Various seeds, beans, wheat, corn, barley, sturdy paper, glue.	
	3.2 Children make colored rice pictures. They design an outline of a fruit and fill it in with colored rice.	3.2 Dyed rice, glue, paper, pencils.	3.2 Dye rice by putting food coloring into a bowl of uncooked rice. Stir until coated and spread it out to allow it to dry.
4. Design cover for their creative stories.	4.1 Children make front and back cover for their own booklet.	4.1 Paper and variety of media for making cover; paint, crayon, etc.	4.1 See: Language Arts - Agriculture - Grade 2 - p. 1, Objective.

MUSIC: AGRICULTURE - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunities for musical experiences.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn fun songs relating to various aspects of agriculture.	1.1 Sing songs; listen to records or tapes.	1.1 "Old MacDonald."	
2. Play musical games relating to agriculture.	2.1 Play games such as "Oats, Peas, Beans & Barley," "Farmer in the Dell," "Old MacDonald."	2.1 Children's music books, records.	
3. Make and play musical instruments using farm products.	3.1 Make instruments using corn, seeds or beans, etc., in a container for shaker rhythm instruments. 3.2 Play songs with instruments made by children for another class or in program.		

HEALTH AND PHYSCIAL EDUCATION: AGRICULTURE - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT 1. Provide movement experience.

2. Provide for an understanding of the foods your body needs to stay healthy.

<table>
<tr><th>OBJECTIVE</th><th>ACTIVITIES</th><th>RESOURCE MATERIALS</th><th>EXPERIENCE CHART</th></tr>
<tr><td>1. Identify the 4 food groups and know what they need to eat each day.</td><td>1.1 Teacher led discussion of 4 food groups.
1.2 Children cut pictures of food and place them in correct group.
1.3 Children write down meals eaten one day and bring to class. For each meal, write the foods on a chart under proper food group. Analyze each other's meals.</td><td>1.2 Magazines to cut pictures of food.
1.3 Chart for each child for each meal:<table><tr><th colspan="2">BREAKFAST</th></tr><tr><td>Milk</td><td>Fruit - Veg.</td></tr><tr><td>Meat</td><td>Breads</td></tr></table></td><td>1.1 Use posters and charts in room.</td></tr>
<tr><td>2. Imitate behavior traits of various farm animals.</td><td>2.1 Play games relating to agriculture; i.e., animals.
2.2 Children imitate movements/noises of various farm animals.</td><td>2.1 ETM "Punchinella".</td><td></td></tr>
<tr><td>3. Learn the growth process of a seed into a plant.</td><td>3.1 Children dramatize the growth of a seed in the ground as it grows to a plant.</td><td>3.1 View film (Willson School):
WHAT PLANTS NEED FOR GROWTH, 1071.
WHAT DO SEEDS DO?, 0951.</td><td>3.1 See: Science: Agriculture - Grade 2, p. 2, Objective 2.</td></tr>
</table>

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Ethnic Backgrounds - Grade 2

READING: ETHNIC BACKGROUNDS - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunities for learning which ethnic backgrounds exists in our area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Tell what ethnic backgrounds are represented in our areas.	1.1 Invite people from area who represent ethnic backgrounds to discuss the country they are from and show any slides, artifacts, etc.	1.1 Neighborhood people, slide projector, screen.	
	1.2 Survey parents to find which nationalities are represented in our classroom. Classify & list on chart.	1.2 Chart, pen.	
2. Read and record meanings of new vocabulary words.	2.1 List vocabulary words on chart, discuss and record meanings. Children keep own list independently; i.e., foreign, language, ethnic, accent, heritage.	2.1 Chart paper, pens, individual sheets for students.	
3. Read recipes from various ethnic backgrounds.	3.1 Children bring recipes from home or collect from friends/neighbors. Read orally to class.		
4. Prepare an ethnic food.	4.1 Discuss recipes children brought in and choose one for class to prepare. Have students recopy the recipe on paper. Teacher rewrite on chart paper for whole class. Discuss and assign students to bring utensils and ingredients. Review steps before beginning.	4.1 Chart paper, pens, recipe ingredients and utensils.	

LANGUAGE ARTS: ETHNIC BACKGROUNDS - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunities for learning other languages.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn simple foreign words.	1.1 Invite people from area who represent various ethnic backgrounds to teach a few words.		
2. Create their own simple foreign language.	2.1 Working in small groups (3-5) have children come up with their own foreign words to match a sentence; i.e., "The sky is blue." Children come up with foreign words to match English words, then present to class.		
	2.2 Students will put sentences together and make class book.		
	2.3 Children make up action sentences and use foreign language to present it to class. Children act out sentence as well as say it. Rest of class tries to interpret sentence.		2.3 Teacher leads discussion on problems foreign students may have coming into school.
3. Write to penpals in foreign country.	3.1 Children will write a class letter to a class in a foreign country. Continue correspondence throughout year.	3.2 Lists can be obtained from Boy Scouts, Campfire Girls. Ask guest speaker if he/she has relatives in that country who could put you in touch with someone.	3.1 Children can take turns writing final copy to be mailed. Also have various children read the letters out loud. (Both incoming & outgoing).
4. Learn sign language.	4.1 Have someone who knows sign language come to class to teach some basic words.	4.1 MSU Speech Department Theater of Silence, contact Dr. Olson	
	4.2 Prepare handout of simple, basic words with pictures for children to study.	4.2 Copy pages from handbook on sign language or Sesame Street Book: SIGN LANGUAGE FUN WITH LINDA BOVE.	

MATH: ETHNIC BACKGROUNDS - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT 1. Apply math skills in writing problems.
2. Provide opportunities to use fractions.
3. Create simple graphs.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write and solve each other's story problems.	1.1 Children write story problem to be put into card file. Problems to be worked through duration of unit at the end of class or free time.	1.1 Cards, file.	1.1 Teacher should check problems before they are put into file.
2. Construct and translate simple bar graphs.	2.1 Ask children to relate their findings of investigations of ethnic backgrounds in our area. Make large bar graphs showing how many different ones there are; the most number of people represented; nationalities represented in our room, etc.	2.1 Large graph paper, pens.	2.1 Refer to Reading: Ethnic Backgrounds - Grade 2, p. 1 Objective 1
	2.2 Child constructs own graph about any class data.	2.2 Large graph paper, construction paper.	
3. Use numbers and simple fractions.	3.1 Using a recipe, prepare a good common one of the ethnic groups represented in our area.	3.1 Recipe, ingredients, utensils.	
4. Compare numbers using < and > symbols.	4.1 Using information from graphs that were constructed, compare numbers using > and < symbols. Teacher writes 2 numbers on board and have students identify larger number, then introduce terms greater than and less than; i.e. 10 is bigger or greater than 7. Follow same procedure for less than concept. Introduce > and < symbols in place of words. Explain mouth always eats greater number.		4.1 Have a crocodile puppet or Pac-Man figure (10 > 7).
	4.2 Have students go to board to work problems using number from constructed graphs.	4.1 Display graphs that were constructed.	

SOCIAL STUDIES: ETHNIC BACKGROUNDS - GRADE 2
ASSIGN. SCOPE OF LESSON STATEMENT Recognize existence of foreign cultures within our area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Portray ethnic heritage of selected groups.	1.1 Invite resource people in to tell about their lifestyles (from foreign countries).		
	1.2 Children compare lifestyles. Their own to a child from foreign country. Teacher writes down observations on chart paper. Compare holiday customs/ traditions as well.	1.2 Resource person from above lesson, chart paper.	
	1.3 Children choose one country as a central theme. Pick one or two days to set up room and do activities pertaining to theme. They can prepare foods, tell/read stories, wear appropriate clothing, decorate room. Even math can relate to theme.		1.3 This will take quite a bit of planning beforehand. Give children plenty of time and resources to research country. May want to assign 1 group to each aspect of project. RECIPES refer to Reading: Ethnic Backgrounds - Grade 2, p. 1, Objective 3.
2. Locate and learn facts about particular countries.	2.1 View films and/or movies on chosen countries.	2.1 Use any NATIONAL GEOGRAPHIC which covers countries we are studying.	
	2.2 Research countries in various magazines.		
	2.3 Information can be used in Objective 1.3.		

ART: ETHNIC BACKGROUNDS - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Provide an opportunity for artistic expression.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create objects indicative of a foreign country.	1.1 Using one of the ethnic background studies, make things representative of that country; e.g., paper mache pinata, Scandinavian Christmas ornaments, Dutch hats.	1.1 Materials necessary for specific item. World Books, CHRISTMAS AROUND THE WORLD.	
2. Identify object from an ethnic background by artistic characteristics.	2.1 Students bring in artifacts from other countries from home to be displayed in room. 2.2 Discuss characteristics of ethnic backgrounds and see which of these are evident in object brought.		
3. Illustrate written sentences.	3.1 Illustrate class book of created foreign language. Each student will illustrate his own sentence.		

HEALTH AND PHYSICAL EDUCATION: ETHNIC BACKGROUNDS - GRADE 2

ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunity for movement experiences.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn folk dances from ethnic backgrounds studied.	1.1 Play folk dances representative of ethnic backgrounds studies.	1.1 MSU Physical Ed. Professors. 1.2 Records.	
2. Identify and learn to play games originating in other countries.	2.1 Play games from ethnic backgrounds studies.	2.1 HAPPY HOLIDAYS, White, Ruth and Alexandra Kusion-Rowe. RESOURCES FOR CREATIVE TEACHING IN EARLY CHILDHOOD EDUCATION, Flemming, Bonnie M., and Darlene S. Hamilton, Harcourt Brace Jovanovich Publishers.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Folk Lore - Grade 3

READING: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT To become acquainted with famous people of the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Summarize one story orally.	1.1 Read at least 3 stories from many made available.	1.1 School library. Public Library, BOZEMAN DAILY CHRONICLE, Historical Society, Museum of the Rockies, BIG SKY MAGAZINE	1.1 Teacher stocks classroom with many books reflecting folklore. The following books are recommended: THE RING IN THE PRAIRIE, edited by Bierborst, John. ARROW TO THE SUN, adapted and illustrated by McDermott, Gerald. NINE TALES OF COYOTE, Martin, Fran. NINE TALES OF RAVEN, Martin, Fran. ANIMAL STORIES, Harris, Joel Chandler. THE REAL BOOK OF AMERICAN TALL TALES, Gorham, Michael. FOLK STORIES, Dolch, Marguerite P. COYOTE STORIES, Mourning, Dove. FOLK TALES OF NORTH AMERICAN, Corcoran, Jean. A CHOICE OF MAGIC, Sanders, Ruth. AMERICAN FOLKLORE, Keats, Jack Ezra.
	1.2 Share a story summary with the class.		

READING: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Become acquainted with animals of the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a story about one of the animals from our area that is read about.	1.1 Read 3 stories about animals.	1.1 School library, public library, Museum of the Rockies	1.1 Refer to the recommended book list on Reading: Folklore, Grade 3, p. 1.
	1.2 Discuss legends and how they were passed on from generation to generation.		
	1.3 Write a legend about one of the animals read about in 1.1.		

READING: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Introduce students to Indian stories and focus on how they relate nature to their lives.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Draw a picture about favorite Indian story and retell the story.	1.1 Read Indian stories.	1.1 School library, public library, Museum of the Rockies	1.1 Refer to the recommended booklist on Reading: Folklore, Grade 3, p. 1.
	1.2 Listen to Indian stories told by guest speaker.	1.2 Fred Donaldson, (guest speaker).	
	1.3 Draw a picture about a favorite story and retell the story.		

LANGUAGE ARTS: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Gain first hand experience with early settlers.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Prepare a list of questions for an interview.	1.1 Teacher led discussion where a list of interview questions is developed.		
	1.2 Contact area resident and interview with help of tape recorder and use of prepared questions.	1.2 Tape recorder, blank tape, local residents: BIG SKY AREA - Chuck Anceny, Dorothy Vick, Verna Sene, Gail Walma, Mrs. Durnham. BOZEMAN - Vernon Westlake, Nash, Simpkins, Judge Tesley. INDIAN CULTURE - Sally Old Coyote.	
2. Write and act out a play about an early settler.	2.1 Listen to the above taped interviews.	2.1 Tape recorder.	2.1 Could be acted out for other class members or another class.
	2.2 Review responses from questions asked during the interview.		
	2.3 Write the play.	2.3 Paper, pencil	
	2.4 Class time provided for practice.		
	2.5 Present play.		
3. Write poetry after listening to legends and myths of the past.	3.1. Listen to recordings of legends	3.1 Museum of the Rockies, Bozeman Public Library.	
	3.2 Provide basic instruction in the type of poetry they are to write.		
	3.3 Provide class time for the writing of the poetry.		

MATH: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Compare today's money system to the bartering system of the past.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss elements of bartering and today's money system.	1.1 Listen to stories of early settlers. money system.	1.1 School library, public library, BOZEMAN DAILY CHRONICLE	
	1.2 Teacher models a bartering experience.		
	1.3 Buy something using the bartering system.	1.3 Objects children bring to school to trade.	
	1.4 Buy something using imitation money at "school store." Include a lesson giving correct change.	1.4 Imitation money	
	1.5 Discuss involvement in money and bartering activities.		

MATH: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Compare the buying power of the dollar in 1900 to its buying power today.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Calculate the worth of the dollar in 1900 and today.	1.1 Browse through the advertisement sections of newspapers from the early 1900's and today.	1.1 BOZEMAN DAILY CHRONICLE, collection of old newspapers.	
	1.2 Construct a chart listing products and their prices in 1900 and today per specific measure.	1.2 Chart skeleton for students to use.	
	1.3 On the chart above, compute the differences.		

MATH: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Investigate how measurement was done in the past.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss how methods of measuring have been refined according to the needs of the people.	1.1 Discuss how the early settlers measured items and how we measure today.		
	1.2 Take measurements of classroom items, the room itself, and the playground facilities using the early settlers methods and our standard method. Record the results.	1.2 Rulers, yardsticks	
	1.3 Discuss the measuring experiences.		

SCIENCE: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Investigate the similarities and differences of the animals in the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Describe the factors necessary for animal survival.	1.1 Compile a list of factors necessary for survival of each animal read about (See Reading: Folklore - Grade 3, Objective 2, p. 2).	1.1 School library, public library, Montana Fish & Game, Wildlife and Parks Service.	
2. Observe and record similarities and differences of animals in the area.	2.1 Make a chart showing the similarities and differences of animals with respect to size, homes, food, enemies, sleeping patterns, territory, etc.	2.1 Skeleton chart.	

SOCIAL STUDIES: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the area through map study.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Locate homesites of early settlers on a map.	1.1 Construct a map of the area.	1.1 Maps from the Bozeman Chamber of Commerce, skeleton map, tapes from Language Arts: Folklore - Grade 3, Objective 1, p. 1.	
	1.2 Locate the places where people interviewed lived and also locate the early settlers homes that are no longer living.		

SOCIAL STUDIES: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Create an understanding of area holidays and seasonal traditions.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Read a calendar to indicate month, year, day of week and date.	1.1 Review various calendars focusing on month, year, day of week and date. 1.2 Fill in blanks on a ditto of a calendar. 1.3 Provides answers to questions asking them to locate specific information on a calendar.	1.1 Various calendars.	
2. Identifies and writes characteristics of the four seasons.	2.1 Review pictures depicting the four seasons. 2.2 Discuss characteristics of the four seasons. 2.3 Given a season, can write 3 seasonal characteristics.		
3. Associates holidays and traditions of the past with dates on a calendar.	3.1 Read about selected holidays from the past. 3.2 Construct a class mural on paper showing the holidays as they occur beginning with the first month of the year.	3.2 Taped interviews (See Language Arts, p. 1), mural paper, crayon.	

SOCIAL STUDIES: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Gain an understanding of the living conditions and clothing of the early settlers.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a story that shows an understanding of the living conditions and clothing of the early settlers.	1.1 Discuss the information about living conditions and clothing of early settlers derived from interviews.	1.1 Taped interviews (Language Arts, p. 1).	
	1.2 Role play a scene from the above discussion.		
	1.3 Write a story (true to life) of an early settler showing the clothing and living conditions of the time.	1.3 Writing paper, drawing paper, crayons.	
	1.4 Draw a picture to accompany story written.		

ART: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Create a three dimensional piece of art after studying drawings of animals.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a 3-D form of an animal.	1.1 Examine and discuss drawings of animals done by Native America of this area.	1.1 School library, public library, Museum of the Rockies.	1.1 Refer to the recommended list on p. 1 of Reading: Folklore - Grade 3.
	1.2 Create a small sculpture of one of the animals studied above. Use native clay.	1.2 Clay from Montana Clay on Highway 191.	

ART: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Investigate early crafts of the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn an early craft of the area and create an art form using the technique learned.	1.1 When interviewing local people (Language Arts, p. 1), inquire about early crafts and choose one craft to learn.	1.1 Taped interview.	
	1.2 Class will vote on a craft they would like to try and then create a piece of art using the chosen technique.	1.2 Local crafts person (if necessary for expert advice), materials will vary depending on chosen craft technique.	1.2 Class members can select a variety of crafts to learn and practice. Techniques for practicing the craft will need to be learned.

MUSIC: FOLKLORE - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Learn, sing and appreciate songs of the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Associate song titles with specific melodies.	1.1 Sing songs from earlier times and discuss the origin and story behind each song.	1.1 Renee Westlake (music specialist at Longfellow School). Jim Stoltz, better known as "Walkin' Jim" who is a resident and entertainer at Big Sky when not walking across the continent.	1.1 "Walkin' Jim's" songs (of which the majority are composed by himself) that children enjoy are: "The Ballad of Liver-Eatin' Johnston," "All Along the Great Divide," "Litter Song," "Lone Lion Runs," "Spirit is Still on the Run."

PHYSICAL EDUCATION: FOLKLORE - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Investigate games played fom the past.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn games of earlier times.	1.1 Review rules of playing games from earlier times including Indian hand games.	1.1 P.E. department at MSU.	
	1.2 Discuss how and why these games originated.	1.2 P.E. specialists in the Bozeman schools.	
	1.3 Play the specific games.	1.3 Interview done on p. 1 Language Arts.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Timber - Grade 3

READING: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of American outdoor heritage through children's literature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Become familiar with some American folklore created about the forests, by reviewing various sources.	1.1 Select books from libraries & display about the room several days before reading to the class.	1.1 Library books on the topic of American outdoor heritage.	
	1.2 Read aloud stories related to the American outdoor heritage.	1.2 "Johnny Appleseed" and "Paul Bunyan" stories.	
	1.3 Read aloud some of the Native American Indian myths related to the forest.	1.3 Native American Indian myths.	

READING: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the forest.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discuss important facts associated with the forest.	1.1 Display various factual books, pamphlets, & articles on the forest. 1.2 Discuss at least 2 important ideas from readings. 1.3 Make word searches using vocabulary from the above.	1.1 Factual materials from libraries, newspapers, pamphlets.	1.1 Vocabulary words.

LANGUAGE ARTS: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT
1. Learn the format of a business letter.
2. Prepare letters of inquiry requesting information from state and national agencies that deal with forests.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Apply the rules for writing a business letter for a specific purpose.	1.1 Use the overhead to show correct form for a business letter.	1.1 Overhead.	
	1.2 Compare with transparency of a business letter with several mistakes.	1.2 Overhead transparency of a business letter with mistakes in form and punctuation.	
2. Write business letters requesting information about forests.	2.1 Distribute names & addresses of state & national agences.	2.1 List of agencies, etc., with proper addresses.	
	2.2 Instruct students to write a business letter requesting information about a topic.		
	2.3 Edit & correct each letter.		
3. Correctly address an envelope.	3.1 Address & mail letters.	3.1 Envelopes.	

LANGUAGE ARTS: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Develop a better understanding of the local timber areas.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Gain & record information from a forest related resource person.	1.1 Listen to a guest speaker talk on the topic of timber.	1.1 Forest ranger.	
	1.2 Ask questions appropriate to the subject.		
	1.3 Generate a list of information gained from interviewing speaker.		

LANGUAGE ARTS: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Generate creative stories, poems, etc.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write various creative poems & stories about the forest.	1.1 Brainstorm adjectives that describe a tree.	1.1 Adopt - a - Tree on the playground as the class' tree.	1.1 Example: Record words on chart under headings of trunk, leaves, sounds.
	1.2 Use these words to write a poem (Cinquaine or Haiku).		
	1.3 Create & present a short story, story, puppet show, or play about the tree's parents, and/or its offspring.		
	1.4 Write a brief, imaginary conversation with your tree. What might your tree think, see, hear & smell?		
	1.5 Describe your tree in enough detail so that someone else can recognize it.	1.5 Visit your tree for a closer look.	
	1.6 Write an imaginary conversation with your tree concerning its history.		1.6 See Reading: Timber, p. 1.
	1.7 Write a tall tale similar to ones read in Reading: Timber, p. 1.		

MATH: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of estimation of the age of trees.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Estimates the age of a tree.	1.1 Use a "Tree Cookie" to mark the annual rings & connect by string to a bulletin board indicating important events in a particular year of the tree's growth. 1.2 Count the rings to estimate its age.	1.1 "Tree Cookie," a large cross-section of a tree which has recently been cut.	

MATH: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Measurement of trees.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Measure a tree & state the relationship between that measurement & their own size.	1.1 Discuss ways in which early timers used their own physical forms to measure. Use hand spans to measure desk, etc., then trees.	1.1 Desks, various things in classroom, class tree.	
	1.2 Estimate size of tree.		
	1.3 Measure tree with tape measure.		
	1.4 Measure tree's shadow.		
2. Construct a bar graph.	2.1 Construct a graph that compares the height of the tree to their age.	2.1 Graph paper, markers, magazine pictures.	

MATH: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Observe differences and similarities among natural objects.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop story problems involving: trees, woodcutters, animal tree dwellers, etc.	1.1 Arrange items in groups to show <, >, =. 1.2 Utilize symbols to write problems from 1.1. 1.3 Write story problems utilizing <, >, =. 1.4 Share these problems with another student. 1.5 Revise and correct. 1.6 Collect for reference, etc.	1.1 Twigs, leaves, pine cones.	

MATH: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Recognizing shapes found in the environment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Show geometric shapes which occur in trees & other plants in the environment.	1.1 Introduce basic shapes using the flannel board.	1.1 Flannel board. Shapes: circles, square, rectangle, triangle.	
	1.2 Take a short walk around the playground. Find the 4 shapes in trees or bushes that they see.		
	1.3 Use construction paper shapes to make images of the trees & bushes they found on their walk.	1.3 Construction paper, scissors.	

MATH: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the interrelationships between trees and the animals that inhabit them.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify animal inhabitants in tree.	1.1 Observe adopted tree. 1.2 Draw living things that are using their adopted tree. 1.3 Begin charting by making 2 columns. One for picture & one for recording number of each kind of inhabitants. 1.4 Construct a bar graph using this information.	1.1 Magnifying glasses.	

SCIENCE: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of trees.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. List the basic characteristics of a tree.	1.1 Adopt-a-Tree on the playground. 1.2 Visit the adopted tree & describe it orally. 1.3 Observe its physical characteristics. 1.4 Develop a list on the chalkboard what they think a tree is. 1.5 Put information together in the form of a poster, chart, or bulletin board.		
2. Classify various trees.	2.1 Brainstorm specific characteristics of trees: leaves, needles, etc. 2.2 Have students collect these items from school yard & their homes. 2.3 As items are gathered place them in groups & develop a display showing these classifications. 2.4 List the trees native to this area. 2.5 Place them into the various groups in the display.	2.1 Leaves, pine cones, needles, various barks, etc.	

SCIENCE: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Discover the ways trees propagate.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Observe a pine cone.	1.1 Direct students to observe the whole pine cone.	1.1 Pine cones for each student.	
	1.2 Take the pine cone apart & closely examine all parts.		
2. Describe propagation methods of various trees.	2.1 Take a walk to observe adopted tree to find out how it propagates itself (cones, seeds, fruits with seeds inside, or suckers).		
	2.2 Try to grow another tree from their adopted tree.		
	2.3 Visit a nursery to observe trees in various stages in growth.	2.3 Cashman's or Heisal's Nurseries.	

SCIENCE: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of interrelationships between trees and the animals that inhabit them.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create a drawing that shows the dependence animals have on trees as homes & food.	1.1 Visit adopted tree.	1.1 Use magnifying hand lens.	
	1.2 Observe tree for evidence of animal inhabitants.		
	1.3 Draw as many animals as they can find which either live in or visit the tree.		
	1.4 Each student then draws a large tree & places animals on it.		
	1.5 Discuss results emphasizing the interrelationships between trees & the animals that inhabit them. Include the dependence animals have on trees as homes & food.		

SOCIAL STUDIES: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of renewable and nonrenewable resources.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify natural resources used for building homes.	1.1 Brainstorm a list of all the things used to build a house.		
	1.2 Use books, etc., to add to list on chart.	1.2 Books, pamphlets, magazines on home building.	
	1.3 Introduce items renewable & nonrenewable.		
	1.4 Group the items on this list in categories of renewable & nonrenewable resources.		
2. Build model homes using natural resources.	2.1 Design & build models of homes from the past. Can possibly use milk cartons and sticks or pretzels to make log cabins.	2.1 Milk cartons, craft sticks or pretzels.	
	2.2 After doing the clay project in art, create an early Gallatin valley village.	2.2 Log cabins, "clay" trees "clay" mountains, rock, dirt, etc.	

SOCIAL STUDIES: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Discover careers related to the forest.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Describe the careers related to the forest or forest products.	1.1 Visit a sawmill to observe the various people employed there.	1.1 Lumber enterprises.	
	1.2 List examples of other related careers.		
	1.3 Create a mural showing the various jobs needed to get the standing tree to the mill & ultimately to the lumber yard & consumer.		

ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate classroom conservation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recycle paper & other natural resources in the classroom.	1.1 Save all waste paper for one week.	1.1 Two large boxes.	
	1.2 Separate into 2 boxes - one for completely used paper & one for paper that could be used again.		
	1.3 Compare amounts of each at end of week.		
	1.4 Discuss ways to reuse items.		
	1.5 Act on the most worthwhile suggestions, making them a part of classroom way of life.		

ART: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Develops an awareness of patterns in nature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Make leaf rubbings.	1.1 Take a nature walk through a field, wooded area, or school grounds to look for patterns in nature.		
	1.2 Record patterns.	1.2 Pencils, paper pads, crayons.	
	1.3 Look for repetition in nature.		
	1.4 Collect samples of leaves.		
	1.5 Do leaf rubbings.		

ART: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Discover nature as an art materials source.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use items found in nature for various art projects.	1.1 Discuss the concept of nature as a source of art materials & inspiration for people.		
	1.2 Discuss also the potential impact of use of environment for art materials including negative effects through misuse.		
	1.3 Gather & use natural materials to create a mobile, collage or scene.	1.3 School yard.	
	1.4 Make crayon rubbings using various textured natural materials.	1.4 Bark, leaves, seeds, rocks, sand.	
	1.5 Use native clay to form art objects and and also things that can be placed in the village. Timber: Social Studies - Grade 3.	1.5 Native clay.	

ART: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Discover earth tone colors from nature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use a variety of colors that can be obtained from natural materials in an art project.	1.1 Brainstorm natural materials that have color that can be used for art.		
	1.2 Collect as many of these items as possible.	1.2 Burnt wood, grass or leaves used to rub shades of green, soil or rotting wood, flowers.	
	1.3 Use these items to draw their adopted tree.	1.3 Soft, rather rough-textured paper.	

MUSIC: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Create musical instruments out of wood.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use forest products to make musical instruments.	1.1 Collect materials while on nature walks, around the playground or at home.	1.1 Cardboard sheets, twine, cardboard tubing, wooden blocks, cellophane.	
	1.2 Create a variety of instruments: strings, woodwinds, and percussion.		1.2 Make cardboard tubes into "woodwinds", cardboard & twine into "strings", and wooden blocks and sticks into "percussion".
	1.3 Have a concert & play the instruments in class.		

MUSIC: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Appreciate music through various recordings related to the forest.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create pictures reflecting mood.	1.1 Listen to a variety of recordings.	1.1 "Thunder & Lightning Polka", John Strauss; "Peter & the Wolf", Prokofiev; "William Tell Overture", Rossini; "Nutcracker Suite", Tchaikowsky; "Woodland Sketches", MacDowell; "Finlandia", Sibelius; "Grand Canyon Suite", Grofe'; "Rocky Mountain Suite", John Denver.	
	1.2 Have the students create line drawings or paintings of what comes to mind as they listen to the recordings.	1.2 Art paper, crayons, markers, water colors.	

HEALTH AND PHYSICAL EDUCATION: TIMBER - GRADE 3

ASSIGN. SCOPE OF LESSON STATEMENT Develop ways nature can be used to play a game.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Play common and invented games using natural materials.	1.1 Invent a game that you could play with these objects, complete with rules. 1.2 Play it. Change it if necessary to improve it. 1.3 Play familiar games, (jacks, marbles, pick-up sticks), substituting natural materials.	1.1 Stones, a stick, or other natural objects.	

HEALTH AND PHYSICAL EDUCATION: TIMBER - GRADE 3
ASSIGN. SCOPE OF LESSON STATEMENT Discover games that involve wood or wood products.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn games that use wood or wood products.	1.1 Discuss the different materials and how they can be used in recreational activities.	1.1 Bat; tennis racket; golf clubs; croquet mallet & balls; piano; swing; seats; bowling alley floors.	
	1.2 Use these materials to play games.		
	1.3 Learn games that were played in early days.	1.3 See Timber: Reading - Grade 3	1.3 Hoop & stick games; Hide & Go Seek.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Early Explorers - Grade 4

READING: EARLY EXPLORERS - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Read and discuss stories relating to early exploration.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recognize several early explorers who traveled through Montana.	1.1 Class discussion of early Montana. Draw upon Lewis & Clark, John Colter, etc.	1.1 Montana map.	1.1 Discuss early Montana for a period of 10 minutes.
	1.2 Show selected materials for reading.	1.2 Library books: Bozeman Public Library SCANNON, DOG WITH LEWIS & CLARK, by Stoutenberg, Adrien JOHN COLTER, by Boesch, Mark.	
	1.3 Read assigned material	1.3 Use books listed above.	
	1.4 Discuss materials	1.4 Notes from the students' reading.	1.4 To be completed the next day.
	1.5 Matching the explorers to a major event connected to them.	1.5 Teacher made worksheet for matching activity.	

LANGUAGE ARTS: EARLY EXPLORERS - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Develop written skills through the use of a journal.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a journal.	1.1 The students will learn and practice format for keeping a detailed journal, dates, place, event, interpretation.	1.1 Journals, pencils.	
	1.2 For a two week period the students will make a daily journal entry creating their adventures as an explorer through the Gallatin Valley.		

MATH: EARLY EXPLORERS - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Averages and graphing of timed runs.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Compute the average time for running an obstacle course.	1.1 Each child will run the obstacle course once with their time recorded.	1.1 Stopwatch, clipboard, pen.	1.1 Some students will need preliminary or on task instruction in using a stopwatch, calculator. and constructing graphs.
	1.2 All scores will be duplicated and distributed to the class to compute sums and averages.	1.2 Ditto master scores, pen, duplicating machine, calculators.	
2. Graph their recorded timings. Bar graphs and/or line graphs will be utilized.	2.1 Student will run the course daily and graph his or her time. Course will be run five days.	2.1 Stopwatch, graph paper, pencils.	
	2.2 The students will graph the class average.		

SOCIAL STUDIES: EARLY EXPLORERS - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of explorers/trappers through discussion and mapping of their passing through the Gallatin Valley.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define who would be considered an explorer.	1.1 Discuss famous world explorers past and present.	1.1 Posters & pictures of famous explorers, including astronauts, as well as historical explorers.	
	1.2 Compile a group definition of an explorer.	1.2 Blackboard, chalk.	
2. List four explorers who investigated Montana and crossed through the Gallatin Valley.	2.1 Using reference books have the students find four explorers, possibly using the names on the board from discussion as a jumping off point & map their journeys through the Gallatin.	2.1 Encyclopedia, MONTANA THE LAND OF SHINING MOUNTAINS, States of the Nation - MONTANA, by Johnson, D.M., THE ADVENTURES OF LEWIS AND CLARK, by de Key, Ormonde Jr. Paper, pencils.	
		2.2 Dittoed map of Gallatin County.	

ART: EARLY EXPLORERS - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Design a "Help Wanted" poster.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design a help wanted poster that might have been displayed by the Missouri Fur Company seeking trappers.	1.1 Discuss the make up of a poster and purposes.	1.1 Several posters as examples.	
	1.2 Brainstorm for brief slogans or phrases.	1.2 Chalkboard, chalk.	
	1.3 Draw designs.	1.3 12" x 18" poster board.	
	1.4 Paint.	1.4 Poster paints, brushes.	

HEALTH AND PHYSICAL EDUCATION: EARLY EXPLORERS - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Obstacle course/John Colter's Junior Run.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design an obstacle course on the schoolgrounds.	1.1 Have a class discuss and list the possible obstacles that the group can construct.	1.1 Chalkboard, chalk.	
	1.2 Map the course on paper.	1.2 Overhead, acetate, pens, manilla paper and pens for students.	
	1.3 Construct any necessary obstacles.	1.3 Any reasonable materials for the construction of simple obstacles.	
2. Determine minimum standards for running the course.	2.1 Students will run the course and average the times for a minimum time standard.	2.1 Stopwatch, clipboard, paper.	
	2.2 Students will run the course daily for 5 days to achieve minimum time.	2.2 Stop watch, clipboard, paper.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Ranching - Grade 4

READING: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Provide students with a variety of resources on early ranching for the students to read, discuss and report on.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Read 1 or 2 articles and share findings with class.	1.1 Select from resources compiled by teacher and read. Teacher may choose to read some also.	1.1 VCR - Bozeman #7 Montana Land & People Series (399) Part II Exploration & Development; Part IV Struggles for an Open Range.	
2. Listen and discuss findings of oral tapes made by early ranchers.	2.1 Listen to: oral tapes, Bozeman Sr. High	2.1 Oral tapes: Bozeman Sr. High Library: #27 Isabelle Durnam - lettuce farm #12-13 Lawrence Christie - diary farm #50 Pearl Kraai - Holland farm #60 Jake Mast - cattle ranching #83 Dorthy Vick - dude ranching #86 Nora Weaver - farm activities	
3. Visit the public library and locate necessary information.	3.1 Have librarian guide students to area of library where local history is found - spend some time browsing through selections.	3.1 Field trip to Bozeman Library.	
4. Visit the museum, taking notes that pertain to ranching.	4.1 List objects used in early ranching: new photographs; read information describing objects; listen to tour guide.	4.1 Field trip to museum.	

LANGUAGE ARTS: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT 1. Explore procedures for writing letters of inquiry requesting information on early ranching and
2. Letters from an early rancher's point of view.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Apply the rules of letter writing for a specific purpose.	1.1 Discuss the parts of a letter.	1.1 Addresses of some prominent valley residents who ranched in the early mid 1900's. Ex: Doris Sandquist, Fred Harrer, Wilbur Springer, Paul Davidson, Dr. M. Burlingame, Malcolm Story*, Ronald Iverson, Grace Bates*.	
	1.2 Discuss and list questions to be asked in letter. 1.3 Write letter of inquiry to several residents in valley.		
2. Write a fictitious letter from the point of view of an early rancher.	2.1 Review parts of letter.	2.1 Books: MONTANA - 2 LANE HIGH IN A 4 LANE WORLD, p. 86, 152-153. MONTANA - OUR LAND AND PEOPLE, p. 172-173.	
	2.2 Read sample literature written in letter form. 2.3 Write a letter to someone. This letter is written as if you are an early rancher.		

LANGUAGE ARTS: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Generate poems, plays journals, word searches and crossword puzzles based on the early ranching theme.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a simple poem about ranching.	1.1 Brainstorm a vocabulary list on ranching and record on board.	1.1 Sample poetry.	
	1.2 Discuss requirements of poetry: rhythmic/non-rhythmic; number of syllable/line; length.		
	1.3 Read student samples to class that are volunteered.		
2. Compose a simple one or two act play about ranching.	2.1 Review techniques of playwriting.	2.1 Play from NEWS EXPLORER, magazine.	
	2.2 Show samples of short plays to class.	2.2 Other sample plays, Ex., "Miss Louisa and the Outlaws." Filmstrips, County Super. of Ed., #70 Life on a Large Ranch #69 Life on a Small Ranch Movie - Bozeman Dist. #7 #001 Pioneer Living on the Farm #281 Pioneer Spinning and Weaving #002 Pioneer Living :The Home #003 Pioneer Living: Preparing Food	
	2.3 Encourage children to read/act out poem they have read.		
	2.4 Write a simple one or two act play about ranching.		
	2.5 Act out play they have written (See 2.4).		

LANGUAGE ARTS: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Generate poems, plays journals, word searches and crossword puzzles based on the early ranching theme (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
3. Compose a 1-2 week journal pretending to be living on an early ranch.	3.1 Read sample diary.	3.1 IN THE FOOTSTEPS OF LEWIS AND CLARK, Nat'l Geo. Society, Lewis & Clark Journal. THE JOURNALS OF LEWIS AND CLARK, Houghton-Mifflin, Monforton School. MONTANA - OUR LAND AND PEOPLE, Chap. XII, X, VI. MONTANA TWO LANE HIGHWAY IN A FOUR LANE WORLD, p. 86, 152-153, 183. Slides from Gallatin County Super. Office, "Montana Homestead," "Cattle and Cowboys," "Lewis and Clark."	
	3.2 Encourage description and feelings.		
	3.3 Assign writing a journal for next 2 weeks.		
4. Construct a simple wordsearch or crossword puzzle.	4.1 Review steps in doing a wordsearch/crossword puzzle.	4.1 Vocabulary list - See Language Arts: Ranching - Grade 4, p. 2, Objective 1. Graph paper, sample crossword puzzle, sample wordsearch.	
	4.2 Share information with classmates.		
	4.3 Construct a crossword puzzle or word search. May want to use computer program for constructing a crossword puzzle or wordsearch.	4.3 Computer programs - a) "Hartley's Wordsearch" b) "Crossword Magic" by L & S Computerware.	

MATH: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Create ideas for basic facts used in story problems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design x - number of word problems using costs of ranching.	1.1 Review elements found in written problems: story line, given information, one step or more, question, etc.	1.1 Texts containing financial facts in reference to ranching. Centennial Calendar. MONTANA - OUR LAND AND PEOPLE, p. 88, 93, 147, 172. MONTANA - A TWO LAND HIGHWAY IN A FOUR LAND WORLD, p. 86, 210, 127. A GOODLY HERITAGE, p. 79.	
	1.2 List on overhead, costs of machinery, land, seed, tools, livestock, etc.		
	1.3 Discuss operations to be used: "+, ÷, x, -", associated with real events.		
	1.4 Assign x - number of problems to be written, that achieve the goals established by the teacher.		

MATH: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Introduce graphing as it relates to ranching.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Gather, in groups of 2-3, pertaining to some aspect of ranching; e.g., size: past to present costs: past to present.	1.1 Read and list all available facts relating to finances.		
	1.2 Compare costs using "<, >, =" signs.	1.2 "A GOODLY HERITAGE", Chapter 5, See Math: Ranching - Grade 4, p. 1.	
2. Apply obtained data to the formation of a graph.	2.1 Review types of graphs: bar, line, pictograph, pie-shaped.	2.1 A GOODLY HERITAGE, Chapter 5, See Math: Ranching - Grade 4, p. 1.	
	2.2 Construct one graph/group.		
	2.3 Share and discuss with class.	2.3 Graphs tell a quantitative story. Groups making presentations will tell a story using the graph as the picture of it.	

MATH: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend the basics of "buy-sell" as it relates to the early general store.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Generate a list of several simple objects found in a general store.	1.1 Brainstorm products found in general store.		
2. Decide on a few of these items to make or buy at a discount to sell in store.	2.1 Children will form a committee to be responsible for constructing the rudiments of a "simple" store.		
3. Design and construct a simple store.	3.1 Working in groups, students will design a store front, to include signs stating cost, sales, etc.	3.1 Sheets of cardboard, sheets of plywood, boards, blankets, old bedspreads. Filmstrip "A Country Store," Gallatin Cnty Sup't Office. Cardboard, table, posters, change box, change, stickers for pricing, worker schedule, merchandise (candy sticks, pencils, rulers, scissors, combs, mirrors, erasers, notebooks, markers, crayons, etc.).	
	3.2 Students will mark items in their store at a reasonable price. 3.3 Students will practice purchasing goods in their own store with someone from their group making change for their buys.		
4. Operate store at recess, noon hours, for a period of a few weeks.	4.1 A sign designating store hours will be designed, constructed, and posted. 4.2 Students will share working time in the store during time "Open."		

MATH: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Develop concept of acreage measurement.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Estimate size of foot, yard, mile, acreage, township.	1.1 Compare size of feet, yards, rods, miles, acres.	1.1 Measuring tape, rulers, trundle wheels. Agriculture in Montana Schools, project trunk. Filmstrips, Gallatin Cnty Supt. #104 "Measurement" #224 "How Long Is It?"	
	1.2 Estimate size of schoolground.		
	1.3 Discuss sizes of some known nearby fields and house yards of students.		
	1.4 Discuss reasons why ranch sizes have changed so much - small to large.		
	1.5 Given items to estimate, will provide a realistic and accurate answer.		

SCIENCE: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the effects of irrigation and fertilizers on crop production.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Research crop yields (alfalfa, wheat), of early ranchers and compare with present yields.	1.1 Graph yields over last 70 years showing increases through irrigation and fertilization.	1.1 Agriculture in Montana Schools Trunk. 1.2 Interview an agronomist if possible.	
2. Design and conduct experiment to show effects of fertilizers on simple plants.	2.1 Plant several seedlings, fertilize half of seedlings. Study effects after several weeks.	2.1 Seeds, styrofoam cups, soil, fertilizers. 2.2 Interview fertilizer salesman, ConAgra.	
3. Research yields of dryland farming compared to irrigated crops.	3.1 Interview ranchers.	3.1 Interview community farmers. Oral tapes - # 2 Les Anderson #46 Sam Johnson, dryland farming.	
	3.2 Research the topic in various books. 3.3 Write a short report on findings. Report is to include a bar graph comparing yield of dry land to irrigated crops.		

SCIENCE: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Illustrate the effects of windmills and wind generators.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Research and study uses of windmills for early ranchers.	1.1 Listen to tapes and discuss. Listen to older ranchers who once used them.	1.1 Oral tapes - 050 Pearl Kraai 073 R. Schutter Interview elderly ranchers.	
2. Visit an active wind generating facility.	2.1 Fieldtrip to Livingston wind generator site (wind farm). Listen to tour guide, taking notes for later discussion.	2.1 Filmstrip, Gallatin Cnty Super. Fieldtrip to Livingston Wind Farm. Movie - Dist. 07 0053 "Pierrot & the Wind 0489 "Wind at Work"	
3. Discuss observations made in conducted research and fieldtrip.	3.1 Organize the class so that each student makes a 2 minute summary of some aspect of wind generated energy.		

SCIENCE: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Create an understanding of types of crops adaptable to Gallatin Valley soils.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Experiment with a variety of types of seeds in different kinds of soils: clay, loam, sandy, etc.	1.1 Plant wheat in different types of soils.	1.1 Soil type samples, seeds, large growing containers. Movie - Bozeman Dist. #7, #779 "Soil: An Introduction" Filmstrip - Superintendent of County Schools, "Soil Conservation."	
	1.2 Plant alfalfa in different soils. 1.3 Plant potatoes in different soils. 1.4 Plant corn in different soils. 1.5 Chart or graph their growth. 1.6 Keep a written log of daily growth observations.		
2. List reasons some crops are not adaptable to Montana growing season.	2.1 Read about and interview farmers.	2.1 County extension service, MSU extension office, valley farmers, "Agriculture in Montana Schools" trunk.	
	2.2 Discuss findings with class. 2.3 In a quiz format, require students to list reasons why some crops are not adaptable to Montana growing season.		

SCIENCE: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of simple machines and how they relate to early ranching.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Investigate by studying the different types of simple machines. How they work and what they are used for.	1.1 Provide students with samples of simple machines.	1.1 Filmstrip, Monforton School. Science texts on machines. Movies - Bozeman Dist. #7, #792, #794, #795, Series "How Simple Machines Help Us" #917 "Simple Machines".	
	1.2 Demonstrate and discover uses.		
2. Compare simple machines to various early farming equipment.	2.1 Locate simple farm tools at museums, antique shops, and old homesteads.	2.1 Field trip to museum, antique shop or homestead.	
	2.2 Compare basic design and use principles.		
	2.3 Field trip to Museum of Rockies.		
	2.4 Class will generate a comparative list showing what simple machines are functioning in farm equipment.		

SOCIAL STUDIES: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Develop and understanding of cattledrives, homesteading, and ranching.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Draw and label a map showing early cattle drives in Montana.	1.1 Research and study maps showing cattle drives.	1.1 Sample maps, plain paper MONTANA - OUR LAND AND PEOPLE, p. 14.	
	1.2 Give students an outline of a Montana map, require that they outline at least 3 major cattle drive routes.		
	1.3 Discussion on why certain routes were used.		
2. Construct a miniature ranch from cardboard, clay and construction paper, showing comparative sizes of shelters, grazing land and crops.	2.1 Research and study photos and and information on early homesteads noting sizes of shelters and lands, also noting details unique to time.	2.1 Cardboard, clay, popsicle sticks, pretzels, construction paints, photographs of old homesteads. Filmstrip - Superintendent of County Schools, "Life on a Large Ranch."	
	2.2 Draw a plan for a ranch, aerial view.		
	2.3 Working in groups make a miniature ranch.		

SOCIAL STUDIES: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Generate interest in exploring old homestead sites.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Explore and discover from first hand experience what some of the remaining older homesteads in the the valley are like.	1.1 With notebook, student will be asked to look for particular items while visiting homesteads: building materials, sizes of buildings and rooms, tools and cookware.	1.1 Fieldtrips to local homesteads.	
2. Invite and listen to older resource people who can share what their childhood homes were like.	2.1 Develop a list of relevant questions to ask class visitor.		
	2.2 Listen to and then question resource people about their early childhood.	2.2 Interview: Margaret Gee, Elsie DeJong, Grace Bates.	

SOCIAL STUDIES: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Introduce basics of political mapping.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Draw and construct a map of Montana/Gallatin Valley, showing the lands that are tillable and those that are not.	1.1 Study and research what parts of state/valley are currently being farmed.	1.1 MONTANA - OUR LAND AND PEOPLE, County Extension office - maps, "Agriculture in Montana School," trunk.	
	1.2 Decide approximately what percent of state/valley is under tillage.		
	1.3 Draw outline map, fill in and color code tillable and non-tillable lands.	1.3 Outline map of county/state.	
		1.4 Show movie or filmstrip on mapping.	

ART: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Develop imagination by creating imaginary life forms.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Illustrate what a simple ranch and early homestead looked like.	1.1 Construct a diorama of a ranch or homestead.	1.1 Shoe boxes or larger: clay, construction paper, small plastic figures.	
2. Create scenes from early ranching. through construction of wall murals.	2.1 Work in small group, design and sketch with pencil what is to be depicted. 2.2 Color.	2.1 Large sheets of plain paper, 2.1 Large sheets of plain paper, pencils, paints, crayons.	
3. Design and construct drawings of various ranch livestock.	3.1 Drawings will be made on objects to be hung in a mobile. 3.2 Groups will work together to balance mobile.	3.1 Encyclopedias, construction paper, twigs, straws, wire, strings. Movie - Bozeman Dist. #7, MAKE A MOBILE.	

MUSIC: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Generate appreciation for cultural music through listening, singing and playing and dancing.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recognize popular Montana themes from early settlement to present.	1.1 Listen to themes on record and learn lyrics of several songs.	1.1 Music - record, cassette, overhead, words of music on, or transparency.	
2. Exposure to popular country music.	2.1 Listen to a variety of country and western songs. 2.2 Identify several popular country music performers today.	2.1 Country & western recordings.	
3. Perform a few simple tunes on recorder.	3.1 Learn and practice notes of musical scale on recorder. 3.2 Learn simple tunes on recorder.	3.1 Recorders, overhead, music for children.	

MUSIC: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Provide understanding of simple musical instruments.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design a simple musical instrument.	1.1 Look at simple musical instruments and designs.		
	1.2 Visit Museum of the Rockies.	1.2 Fieldtrip to museum.	
	1.3 Using simple objects, student will construct a simple instrument.	1.3 Older musicians from community; e.g., Rolf Johnson.	
	1.4 Students will play instruments for classmates.		

HEALTH AND PHYSICAL EDUCATION: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Experience and learn skills of square dancing.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn and enjoy square dancing. dancing.	1.1 Have square dance demonstration to learn basic skills.	1.1 Parent or resource person skilled in square dancing, music.	
	1.2 Practice square dancing.	1.2 Music - record or tape.	
	1.3 Discussion on how square dancing makes you feel.		
	1.4 Write a simple poem reflecting how square dancing makes you feel.		

HEALTH AND PHYSICAL EDUCATION: RANCHING - GRADE 4
ASSIGN. SCOPE OF LESSON STATEMENT Develop greater physical endurance.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Increase cardiovascular strength through exercise.	1.1 Record amount of exercise (aerobics) that students can do in a time period, perhaps recording heart beats per minute. Record all results.	1.1 Music - record or cassette Movie - Bozeman Dist. #7, "Fun to be Fit" series.	
	1.2 Continue exercise program and gradually increase kinds of exercises and duration.		
	1.3 Repeat 1.1 (above) at regular intervals and record and graph individual results.		
2. Experience outdoor recreation: cooking, sleeping, hiking.	2.1 Choose a site where old homesteading once occurred.		
	2.2 Plan schedule and supplies.	2.2 Essential camping gear! Assisting parents. Movie - Bozeman Dist. #7, #729 "Backpacking".	
	2.3 Keep diary of trip.		

HEALTH AND PHYSICAL EDUCATION: RANCHING - GRADE 4

ASSIGN. SCOPE OF LESSON STATEMENT Provide understanding of how medicine has advanced from home remedies to modern day medicine.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Record in journal medical practices of past to present.	1.1 Visit museum to view early doctoring methods.	1.1 Fieldtrip to museum. MONTANA - OUR LAND AND PEOPLE, p. 21.	
	1.2 Read materials on early medicine.		
	1.3 Interview elderly doctor to see how medicine has progressed.	1.3 Resource person (doctor).	
	1.4 Keep journals of all findings.		
	1.5 Class discussion of the topic, medicine, past to present.		

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Railroads - Grade 5

READING: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop and construct a dictionary centered on a specific field of interest.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop a word bank using specific terminology.	1.1 As the student reads material on railroads, write down the vocabulary which pertains to railroads. Place word and it's definition on index cards. 1.2 Include an illustration where appropriate. 1.3 Include a pronunciation key of each word. 1.4 Include a sentence demonstrating the word's usage(s). 1.5 Arrange the words in alphabetical order in the file card box.	1.1 3"x5" notecards, file box.	1.1 The student may be inclined to omit words which they already know. Stress the importance of being thorough and not to be selective in this regard. Goal 15-25 cards.
2. Produce a word search and/or cross word puzzle using a dictionary.	2.1 Design a picture of a train as the structure for the word search or crossword puzzle. 2.2 Arrange the words in the design. 2.3 Provide the clues for crossword puzzle. 2.4 Exchange puzzles with others in in the class to share.	2.1 Centimeter graphing paper, markers.	2.1 When constructing either the word search or crossword puzzle, it will be helpful to get the words layed in a design pattern before working on the clues or filling in the rest of the grid with letters.

READING: RAILROADS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of idiomatic expressions and slang.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write sentences containing idioms, which demonstrate they understand their meaning.	1.1 Discuss with the students idioms and slang from various areas in language. Elicit their meanings from the context of the sentence.	1.1 Chalk, blackboard.	
	1.2 Interpret a series of idioms and slang terms from a written form.	1.2 Worksheet containing sentences or paragraphs using idioms and slang terms.	
	1.3 Write 3-6 sentence paragraphs, each one containing 2-4 idioms and 3-4 slang terms. The theme should focus on railroads.	1.3 Theme paper.	1.3 Less idioms or slang words could be required for students of lower ability.
	1.4 The students should choose their best stories to read and discuss with the class.		1.4 The number read by each student will be determined by the size of the class.

ASSIGN. SCOPE OF LESSON STATEMENT Develop and understand the common characteristics of folktales and legends.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify the common characteristics of a folktale and legend.	1.1 Read or watch enactments of 3 folktales from different cultures and discuss their commonalities.	1.1 AV materials.	
	1.2 Read or watch enactments of 3 folktales of American Western culture and discuss the commonalities.	1.2 AV materials.	
2. Write their own legend using principles common to this form of literature.	2.1 Make a class book using their own folktale and include the common elements.	2.1 Construction paper, markers. 2.1 Carbon paper, overhead projector.	2.1 This can be geared to any level of ability by allowing individuals to either work in a comic book style or in paragraph form. It can also be worked in pairs with student having more developed linguistic skill aiding the others.
	2.2 Illustrate the folktale or legends.		
	2.3 Read the folktale or legend to the class or students in lower grades.		

READING: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding for the use of the card catalogue and book index systems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use a card catalogue to find information on a selected aspect of the American railroad.	1.1 Review the parts of a library file card.	1.1 Sample cards, ditto of a sample card identifying parts.	
	1.2 Go in a small group to the library and locate books using the card catalogue.		
	1.3 Make a locator card on a book obtained from the library.		1.3 Students can exchange books they checked out from the library to make their locator card.
2. Use the indexes in 3 books to locate specific information on the American railroad.	2.1 Discuss the components and arrangement of an index.	2.1 Overhead or opaque projector.	2.1 Groups should be selected carefully and consist of no more than 4 at a time. Arrange in advance with the librarian a schedule. Pairs may be used to aide each other in locating resources.
	2.2 Pick a selected topic and require students to look through the indexes to obtain the pages and information required.	2.2 School or public library.	
	2.3 Use a sample index card to answer questions related to finding information.	2.3 Prepared ditto of index card.	

READING: RAILROADS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Research and write notes needed to complete a 1-2 page report on American railroads.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Select a topic on American railroads based on certain criteria.	1.1 Discuss the basis for selecting suitable material.	1.1 Chalk, blackboard, overhead.	1.1 This will work in conjunction with Language Arts - Railroads, p. 3, Objectives 1-4.
	1.2 Brainstorm possible topics using the guidelines established in 1.1.	1.2 Chalk, blackboard.	
	1.3 Select a topic.		
	1.4 Use the library to locate suitable material on the topic.		
2. Write a series of notes following a study guide (standard outline form) based on what was read.	2.1 Discuss outlining and its use in organizing materials.		
	2.2 Fill in a simple outline form.	2.2 Outline form.	
	2.3 Read material in sources and use outlines to organize notes.		

LANGUAGE ARTS: RAILROADS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Write a report on the history of the railroads.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Locate and extract enough information to write a report using a book format.	1.1 Brainstorm topics centered around the railroad.	1.1 See Appendix: Lists 15 books available in the Bozeman Library on the railroad and 16 on Montana history, which deal with the importance of the railroad in Montana. BOZEMAN CHRONICLE fill in on railroads.	
2. Write an outline.	2.1 Develop a working outline as a guide.		
3. Write and edit a rough draft.	3.1 Write a rough draft. 3.2 Edit the rough draft with a partner.		
4. Assemble a book using the material stated in Objective 1.3, above.	4.1 Write the paper using outline and the rough draft.		4.1 After the rough draft is finished and edited, assemble a book by sewing the pages into the manilla cover. Design the cover, then write the final paper into the book.
	4.2 Complete at least 2 drawings or paintings to be inluded in the report.	4.2 Carbon paper, tracing paper, unlined drawing paper, pencils, markers, paints.	
	4.3 Design a cover.	4.3 Needle, thread, manilla folder, white lined paper.	
	4.4 Assemble the report in book form.		

MATH: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT 1. Use maps of the area to determine distance between given locations.

2. Using this information, solve story problems using basic operations of addition and subtraction, multiplication & division.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Determine the distances between two points using a road map.	1.1 Discuss the various parts of a map, focusing on the mileage key. Then use this to find the distance between ten points using Bozeman as the point of origination.	1.1 Maps of Montana, rulers, opaque projector (if only 1 map is available).	
2. Write story problems involving distance.	2.1 The first three should be written together as a class goal.	2.1 Overhead or chalkboard.	
	2.11 Write a problem using distance between 3 points and calculate total.		
	2.12 Write a problem using 3 points, calculate total distance going and returning.		
	2.13 Write a problem using 3 points, calculate total distance and returning only part of the way.		
	2.2 Solve a series of ten teacher-designed problems using the goals stated in 1.1.	2.2 Prepared ditto.	
	2.3 Write their own story problems using maps and distances. Use the same three goals as stated in Activity 2.1. Place the problems on file cards and the solution on the back sides.	2.3 Montana maps, notecards.	
	2.4 Exchange cards and solve each others problems. Discuss some problems that work particularly well and some that are confusing.		

MATH: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT 1. Use maps of the area to determine distance between given locations.
2. Using this information, solve story problems using basic operations of addition and subtraction, multiplication & division (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
5. Recognize if a problem contains too much or too little information.	5.1 Give the students a ditto on which each problem has either too much or too little information. Discuss as a class and solve the problems.	5.1 Worksheet on ditto.	
	5.2 Give the students a worksheet on which the problems contain too little or too much information. a. Solve those that have too much and underline the distractors. b. Locate and tell what is missing with those that have too little information.	5.2 Worksheet.	
6. Use a time table to determine departure and arrival times, and time in transit.	6.1 Display a time table and discuss the layout. Discuss its use and solve five problems using a simplified table.	6.1 Time tables either railroad, Amtrak, airplane or bus. Overhead, chalkboard, clocks, ditto of sample simplified schedule.	
	6.2 Construct a time table using hours hours, half hours and maps. Include 4-6 departure and arrival times based on 50 mph speed. Do this as a class.	6.2 Construction board, markers, chalkboard, maps.	
	6.3 Students construct their own time time tables using 4-6 departures and arrivals.	6.3 Construction paper, markers, maps.	
	6.4 Using the class prepared time schedule, solve story problems which calculate time in transit, cost, and distance traveled.	6.4 Prepared ditto.	

SCIENCE: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding for the use of simple machines & their use.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recognize the use of simple machines in everyday life.	1.1 Provide a definition of work and show film on the four simple machines.	1.1 Films, chalkboard, chalk.	
	1.2 Discuss and make chart showing the divisions of simple machines.		
	1.3 Explore how they could be used in construction of the railroad.		
2. Demonstrate the use of simple machines in experiments.	2.1 Bring in various tools and discuss which principles they use to do work. Use the lever and wedge in experiments for moving, lifting, and opening.	2.1 Pliers, crowbar, hammer, wedges, boards, nails, fulcrums, log for splitting.	
	2.2 Bring in various pulleys and ropes and discuss their uses. Conduct various experiments usig pulleys to life and move heavy objects.	2.2 Pulleys, rope, large heavy blocks.	
	2.3 Bring in boards and blocks to construct ramps. Discuss the ratio of work and resistance. Use the ramps in various experiments to demonstrate the use of a ramp.	2.3 1 x 4's in 3 different lengths, blocks to support ramps.	
	2.4 Bring in various spheres and wheels and discuss circumference, radius, and diameter. Discuss the use of the wheel to help make moving heavy objects easier. Do experiments in moving objects.	2.4 Spheres, tires, cylinders, rope, blocks.	
3. Define and use various terms concerning work and simple machines correctly.	3.1 Discuss potential and kinetic energy, friction, ways of reducing friction, and uses of friction. Discuss how friction and inertia operate in the use of simple machines.		

SCIENCE: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Write and present oral report on various railroad topics.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Categorize the various elements involved in the railroad business including construction and railway travel.	1.1 Outline the elements involving a railroad: a. track laying; b. tunnels; c. bridges; d. engine types; e. railroad cars.		
2. Select a railroad related topic and write a report on that topic.	2.1 Choose a topic for research.	2.1 See appendix for reading material.	2.1 This could be tied in with Language Arts, p. 3, Activities 1-4.
	2.2 Use the library to find material. 2.3 Write a paper on the topic. Include: a. outline; b. sources; c. 2 page paper; d. drawing or model.		
3. Present an oral report on the material gleaned from the written report.	3.1 Provide sufficient time for the student to give oral report, and allow time for reaction and questions from others in the class.		

SCIENCE: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of a balance in nature and the human element.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Show an understanding of the need for a balance of nature and man's role as a destroyer and maintainer of this balance.	1.1 Discuss the role of the buffalo as related to the life style of Native Americans: food; shelter; migration; hunting method; spiritual. 1.2 Discuss the role of the buffalo as related to the construction of the railroad. 1.3 Discuss the buffalo from its physical characteristics, habitat, mating, birth and migration. 1.4 Review pictures and written information on Yellowstone's buffalo herd.		1.4 Yellowstone National Park has a variety of booklets on the buffalo. Post cards are also available.
2. Construct a map showing specific information and can develop a key and mark them on map.	2.1 Construct a map showing the habitat of the buffalo. Include the following: railway routes; Indian tribe distribution.	2.1 U.S. map, overhead projector, markers, colored pencils	

SCIENCE: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of a balance in nature and the human element (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
3. Construct a graph showing population densities of buffalo.	3.1 Construct a graph showing the population shift of buffalo.	3.1 Graph paper, overhead.	
4. Synthesize the information concerning the balance of nature and man's role in a one page written paper.	4.1 Discuss the elements involved in the destruction of the buffalo.		
	4.2 Discuss the elements involved in the survival and abundantly thriving Yellowstone buffalo herd.		
	4.3 Provide an outline showing the main ideas and use this outline to write a one page paper. Discuss the organization for the presentation of ideas.	4.3 Use overhead to organize student input, suggesting various outline topics that could be utilized in the paper.	

SOCIAL STUDIES: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding for the parts and uses of a map.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a map showing local train routes and stations.	1.1 Discuss the parts of a map. 1.2 Construct a map showing railways throughout Montana and then one just of the Gallatin Valley. Include: a. key; b. N-S-E-W directions; c. state or county boundaries.	1.1 Overhead. 1.2 Maps, overhead.	
2. Make observations on a fieldtrip and then use this information to answer questions.	2.1 Take the students on a fieldtrip to the Livingston Burlington Northern Center. 2.2 Answer questions discussed prior to the fieldtrip. 2.3 Conduct an interview with railroad personnel using questions previously developed. Include: a. safety; b. materials transported; c. schedules; d. various aspects of specific jobs done in the roundhouse.		2.1 See resource list for who to contact.

SOCIAL STUDIES: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the role the railroads had/has in bringing people, goods and ideas into the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Take notes from a lecture format.	1.1 Present an outline of the material to be covered in a series of discussions: a. ethnic groups involved in railroad construction; b. population; c. growth; d. communication; e. job opportunities; f. cultural contribution; g. educational contributions.	1.1 Investigate Livingston and/or Bozeman Public Library.	

ART: RAILROADS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Design a travel brochure.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Locate and identify points of interest in the Gallatin Valley, (points of interest; i.e., recreation, agriculture, business, etc.).	1.1 Investigate a map and locate various points of interest.	1.1 Opaque projector, handouts.	
	1.2 Label points on a map showing points of interest.	1.2 Maps of area, blank maps (dittos).	1.2 Chamber of Commerce - Bozeman, Livingston, Three Forks.
	1.3 Identify points that can be traveled to by railroad, either in the past or present.	1.3 Opaque projector, maps and rail routes.	1.3 Since railroads have restricted their points of arrival and departure it may be useful to speak of the past as well as the present.
	1.4 Discuss alternative modes of transportation once the person has arrived at the train station.	1.4 Chalkboard, chalk.	
2. Design a travel brochure advertising points of interest.	2.1 Discuss travel brochure format and outline the important aspects they contain.	2.1 Travel brochures from various travel agencies in Bozeman.	
	2.2 Choose core elements for the brochure and write them down. Include a list of adjectives and adverbs which enhance the elements.		
	2.3 Design a brochure by selectively placing the elements; find or draw pictures which will illustrate their chosen purpose.	2.3 Magazines, MONTANA, NATIONAL GEOGRAPHIC, AUDUBON, NATIONAL WILDLIFE, BOZEMAN CHRONICLE, posterboard, marker, paint.	
	2.4 Using at least 3 different handwriting scripts describe the positive features of their points of interest. Include the following categories: Accommodations; activities; shopping; recreation (cultural, outdoor); travel (railroad, airplane, car); time schedule; costs/day.	2.4 Calligraphy pens, stencils, cut out letters, press type, rulers, markers	2.4 Have the students call motels or notice ad signs, call guest ranches, airlines, car rentals, National Park, hot spring resorts, ski areas, Fish & Game, (check out of state hunting licenses). They can inquire about services, rates, etc.

ART: RAILROADS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Use the railroad as the subject for various medium productions.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a mobile.	1.1 Draw or cut and paste pictures of trains onto tag board. 1.2 Cut them out and hand from stiff wire to make mobile.	1.1 Marker, crayons, magazines, tag board, stiff wire (clothes hangers), glue, string.	
2. Draw a still life using three different graphic techniques.	2.1 Draw a still-life using machine parts reflecting: a. contour drawing; b. rendering; c. positive and negative spatial drawing.	2.1 Bring in gears and other assorted machinery parts, charcoal, pencils, black paper, ink, pens and quills, drawing paper.	
3. Demonstrate a beginning development of a perspective drawing.	3.1 Perspective drawing - teach single point perspective.	3.1 Drawing paper, pencils.	
4. Assemble a collage.	4.1 Construct a tissue paper and photo collage using engines and cars as a subject.	4.1 Tissue paper, magazines, photos.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Cities and Towns - Grade 5

READING: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Gain experience in gathering information through reading pertinent articles and stories.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Locates and summarizes information from stories and articles about towns and cities in the Gallatin Valley.	1.1 Read articles and stories about early days of towns in the Gallatin Valley, starting with Bozeman.	1.1 "A Brief History of Bozeman," available from TRC file. MONTANA IN THE MAKING, Newton, Carl Abbot, p. 77. BOZEMAN CHRONICLE, Centennial Ed., March 27 - April 1, 1983.	1.1 Gallatin County Bicentennial Oral History Tapes, #978.6, GA-58, Bozeman Senior High School Library will be referred to in resource material as Oral History Tapes with name of interviewee.
	1.2 Research Amsterdam and Churchill.	1.2 BOZEMAN CHRONICLE CENTENNIAL EDITION, March 29, 1983, p. 14. Mrs. James (Elsie)DeJong, Oral History Tapes.	
	1.3 Research Manhattan.	1.3 BOZEMAN CHRONICLE CENTENNIAL ED., March 29, 1983, p. 11. "Our Pioneers," from Montana Travel Service.	
	1.4 Research Gallatin City.	1.4. HEADWATRS HERALD available from Montana Department of Fish, Wildlife and Parks.	
	1.5 Research Logan.		
	1.6 Research Trident.		
	1.7 Research Three Forks.	1.7 Mary Cloninger, Oral History Tapes.	
	1.8 Research Willow Creek.	1.8 Mrs. Marie Shedd Flaherty, Oral History Tapes.	

READING: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Explore the relevance of Ft. Ellis to the history of Gallatin Valley.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recognize and utilize reading as essential tool for reseach in other subjects.	1.1 Research death of John Bozeman for Social Studies.	1.1 BOZEMAN CHRONICLE CENTENNIAL EDITION, Sunday, March 27, 1983.	

READING: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Broaden understanding of causes for Gallatin Valley settlements.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Familiarize students with mining camps.	1.1 Read excerpts from ROUGHING IT, Mark Twain.	1.1 ROUGHING IT, Mark Twain.	
	1.2 Utilize notetaking skills to record significant aspects of life in mining camp.		
	1.3 Use these notes to give oral report.		

READING: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Understand forces that cause a town to die.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify by name at least 2 ghost towns in the Gallatin Valley.	1.1 Select and read articles and books that have accounts of Gallatin Valley ghost towns.	1.1 GHOST TOWNS OF MONTANA, Miller, Don C. "Headwaters Herald," available from Montana Department of Fish, Wildlife, and Parks.	
2. Give oral report on a ghost towns.	2.1 Use note taking and outlining skills to prepare an oral report on a ghost town.	2.1 Notepaper, pencil. 2.2 GHOST TOWNS OF MONTANA, Miller, Don C. "Headwaters Herald".	

READING: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Acquaint students with the concept that fashions change periodically.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recognize that fashions change.	1.1 Research newspapers and catalogs to observe fashions of pioneer days.	1.1 BOZEMAN CHRONICLE BICENTENNIAL ED., March 27-April 1, 1983. Newspapers morque; replica of SEARS ROEBUCK CATALOGUE, 1908.	
	1.2 Research newspapers and catalogs to observe present day fashions.	1.2 Current newspapers and catalogs.	
	1.3 Reproduce by means of copy machine or sketching examples of both old and new.	1.3 Paper, pencil, copy machine (optional).	
	1.4 Assemble a booklet of illustrations arranged according to period.	1.4 Scrapbook or looseleaf binder and unlined notebook paper.	

READING: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Help students perceive constants and variables in past and present entertainment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1.1 Identify cultural differences between past and present entertainment.	1.1 Research newspapers for articles and advertisements of cultural events.	1.1 BOZEMAN CHRONICLE, April, 1983, p. 14. Current issues of BOZEMAN CHRONICLE. BOZEMAN CHRONICLE supplement, 'This Week'.	
	1.2 Compare past events and emphases with present events and emphases.		
	1.3 Write a report on contrasts and similarities of entertainment then and now.		

LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Review the format of a business letter.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Apply the rules for writing a business letter for a specific purpose.	1.1 Distribute selected advertisements from magazines to each student.	1.1 Magazine advertisements of selected products.	
	1.2 Tell students they have been hired by a store to write for information concerning these new products with the possibility they may be included in the inventory in the near future.		
	1.3 Discuss the following phrases and their importance to the assignment: who, what, where, when, why.		
	1.4 On the overhead, have a transparency of a business letter with several mistakes in letter form and punctuation. Solicite suggestions from class for corrections.	1.4 Overhead, transparency of a business letter with mistakes in form and punctuation.	
	1.5 Remind students of correct letter form and to inclde the "5 W's" in their requests.	1.5 Experience chart of proper letter form.	1.5 Business letters: Heading (address, city, state, date); Inside address (your return address); Greeting (Dear___,) Body (main part of the letter, closing, salutary, comments) Signature (your name).

LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Prepare letters of inquiry requesting information from state an local agencies regarding history and development of Gallatin area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write business letter requesting information about Gallatin Valley's history and development.	1.1 Distribute cards with names and addresses of state and local agencies to every student. Instruct students to write a business letter requesting information about the particular town or city for which they are responsible. 1.2 Edit and correct each letter. 1.3 Have each student place their card in an envelope with their name on back for future reference.	1.1 List of agencies.	
2. Apply rules for addressing envelopes.	2.1 Return each agency card to the student who wrote the letter. Have each card cut into 5 sections: a) name of agency; b) address; c) city; d) state; e) return address. 2.2 Correctly address envelope.	2.1 Agency cards cut into sections.	
3. Locate appropriate zip codes for addresses.	3.1 Using the ZIP CODE DIRECTORY, locate the appropriate zip for the agency that each student has written to requesting information about Gallatin Valley history. 3.2 Record zip on letter inside address and on the envelope in the appropriate places.	3.1 ZIP CODE DIRECTORY.	

LANGUAGE ARTS/READING: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Develop and use note taking skills in gathering information on Gallatin Valley cities and towns.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Demonstrate mastery of note taking skills.	1.1 On the chalkboard teacher will demonstrate selecting relevant facts and recording them to facilitate recall of information.	1.1 Chalkboard, chalk.	
	1.2 Read one of the research articles listed in resource materials.	1.2 "A Brief History of Bozeman," available at Teachers' Resource Center, MSU. BOZEMAN CHRONICLE CENTENNIAL ED., March 27-April 1, 1983.	
	1.3 Take notes on the articles.	1.3 Notebook paper.	
	1.4 After teacher has checked notes for clarity and suitability, student will file notes in loose-leaf binder for ready reference.	1.4 Loose-leaf binder.	

LANGUAGE ARTS/READING: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Achieve competency in outlining skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Gain proficiency in using an outline to aid in preparing oral or written reports.	1.1 Teacher, using chalkboard, will explain and demonstrate purpose and procedure for outlining.	1.1 Chalkboard, chalk.	
	1.2 Teacher and students together will outline articles until students demonstrate comprehension of procedure.	1.2 Chalkboard, chalk, newspaper articles, preferably pertinent to Gallatin County history, (See Language Arts, p. 5).	
	1.3 Prepare outline in conjunction with oral or written report for this unit.	1.3 Notebook paper, pen or pencil.	

LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Help students attain proficiency in giving oral reports.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Distinguish and discuss difference between past and present.	1.1 Select some aspect of city life and research differences between past and present.	1.1 BOZEMAN CHRONICLE CENTENNIAL ED., March 27, 1983-April 1, 1983. GALLATIN COUNTY BICENTENNIAL ORAL HISTORY TAPES, 978.6, GA-58, Bozeman Senior High School Library.	
	1.2 Use note taking skills to prepare for oral report.		
	1.3 Present oral report to class.		

LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Recognize importance of carefully proofreading any written material.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify and correct errors in spelling, grammar, punctuation, and sentence construction.	1.1 Explain and demonstrate proofreading, showing marks to be used for spelling errors, grammar, punctuation, and sentence construction. 1.2 Have students proofread their own and others' written work.	1.1 Written assignments for this unit.	

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LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Correlate language arts with social studies and reading by checking all written work for correct grammatical form, spelling, and sentence construction.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will write a description of a given location, contrasting past and present.	1.1 Use the social studies research and report on Gallatin County for contrasting past and present.	1.1 HEADWATERS HERALD, available from Montana Department of Fish, Wildlife and Parks.	
2. Detect and correct errors in grammar, spelling and sentence construction.	2.1 Carefully check all written material for errors in grammar, spelling, and sentence construction.	2.1 Their own written material.	
3. Proofread all of their written material.	3.1 Carefully check all the writing they have done for this unit and correct errors.	3.1 All of their written material for this unit.	

LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT By simulating a diary of a pioneer, students will enhance their understanding of pioneer life.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Provide accurate historical information in diary form.	1.1 Research articles and stories for information on pioneer life.	1.1 BOZEMAN CHRONICE, March 30, 1983, p. 9. GALLATIN COUNTY BICENTENNIAL ORAL HISTORY TAPES, Bozeman Senior High School Library, #978.6, GA-58, Article by F.R. Montgomery, Teachers' Resource Center, MSU.	
	1.2 Record information in first person, in the form of a diary, as though living in that era.	1.2 Notebook and pen or pencil.	

ASSIGN. SCOPE OF LESSON STATEMENT Students will distinguish between a biography and autobiography.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define a biography and identify examples.	1.1 From articles in BOZEMAN CHRONICLE'S CENTENNIAL EDITIONS, select articles that are biographical. 1.2 Make a list of biographical articles with authors. 1.3 Arrange list alphabetically according to subject.	1.1 BOZEMAN CHRONICLE CENTENNIAL EDITIONS, March 27-April 1, 1983.	
2. Define an autobiography and identify examples.	2.1 Select autobiographical articles from BOZEMAN CHRONICAL CENTENNIAL EDITIONS. 2.2 Make a list of autobiographical articles. 2.3 Arrange list alphabetically.	2.1 BOZEMAN CHRONICLE CENTENNIAL EDITIONS, March 27-April 1, 1983.	

LANGUAGE ARTS: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Introduce and refine drama skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Introduce students to aspects of drama presentation.	1.1 Select a play suitable to age and talents of children. 1.2 Read carefully the play to determine necessary props.		
2. Will assume responsibilities for various aspects of producing a play.	2.1 Assign responsibilities to various students in consultation with students: character parts, props, stage management, lights.		
3. Will satisfactorily memorize character parts.	3.1 Memorize assigned lines, practicing expression and delivery for convincing performance.		
4. Props and equipment will be obtained.	4.1 Obtain necessary accessories and have them in readiness. 4.2 Rehearsals will be conducted as needed to assure smooth performance. 4.3 Perform play for invited audience, other classes, parents, and/or community as deemed appropriate.		

SOCIAL STUDIES: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of time using time lines.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create a time line with reference to the events of his own life.	1.1 Initiate a class discussion of time lines. Do a sample one on the board for the teacher.	1.1 Blackboard, chalk.	
	1.2 Have the students identify major events in their own lives and make a time line for their own lives.	1.2 White construction or typing paper, markers, rulers.	
	1.3 Allow each student to present his time line for the rest of the group.		
2. Create a time line with reference to fur trappers, explorers, early settlers in the Gallatin Valley area.	2.1 Have students make a blank time line and hang it around the walls of their room.	2.1 White construction or typing paper, markers, rulers.	
	2.2 Have students create a similar blank time line in the front of their social studies notebooks.		
	2.3 Throughout the course of the unit, add events to the time line on the wall as they are studied. Also have the students add the events to their own time line.	2.3 Markers.	

SOCIAL STUDIES/ART: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Create an understanding of the population centers' locations.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Label an outline map of Gallatin County with towns, cities, points of interest, natural resources.	1.1 Have each student label an outline map of Gallatin County with towns and cities, points of interest, and natural resources.	1.1 Outline maps of Gallatin County.	
2. Construct a map of Gallatin County showing population centers, points of interest, natural resources.	2.1 Have each student construct a map of flour, salt, and water, showing population centers, points of interest, and natural resources. Paint the centers. Paint the map according to a map legend. 2.2 Initiate a discussion about why population centers are located where they are.	2.1 Cardboard square, flour, salt, water, poster paints, brushes.	

SOCIAL STUDIES: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Explore the relevance of Fort Ellis to the history of Gallatin Valley.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Demonstrate awareness of Ft. Ellis' purpose.	1.1 Research death of John Bozeman and subsequent militia movements.	1.1 BOZEMAN CHRONICLE CENTENNIAL EDITION, Sunday, March 27, 1983.	
2. Identify location.	2.1 On map of Bozeman area, point out location of former Ft. Ellis.		

SOCIAL STUDIES/ART: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Reconstruct history through construction of historical model.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design replica of Ft. Ellis' layout.	1.1 Using photographs or sketches of Ft. Ellis, determine layout. 1.2 On paper, draw pattern of design to be used.	1.1 Old newspapers, history books, photographs.	
2. Construct replica of Ft. Ellis.	2.1 Working as individuals or in groups, students will construct a model of Ft. Ellis, showing layout. 2.2 Have students also construct models of the various buildings and place them in correct relationship.	2.1 Cardboard square, flour, salt, water.	

SOCIAL STUDIES/READING: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Recognize the association between resources and development of population centers.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Determine what resources are responsible for the growth of a particular town in the area (Belgrade).	1.1 Research articles detailing early development of Belgrade. 1.2 Conduct a fieldtrip to grain elevator in Belgrade.	1.1 BOZEMAN CHRONICLE CENTENNIAL EDITION, March 29, p. 8.	

SOCIAL STUDIES: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Gain information about the development of Gallatin Valley's cities and towns through researching prominent pioneers.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify names of prominent residents of early Bozeman.	1.1 Research and identify prominent residents of early Bozeman.	1.1 BOZEMAN CHRONICLE, "Prominent Pioneers," April, 1983, pp. 3,4,9,10.	
	1.2 Interview senior citizens who may have knowledge of or association with early pioneers.	1.2 Senior Citizen Center, Hillcrest Senior Citizens, Professor Roeder, MSU.	
2. Give brief account of contribution above residents made to Gallatin Valley.	2.1 Use note taking skills to record identities and contributions of the individuals.		
	2.2 Write reports from note.		
	2.3 Make booklets.		
3. Associate prominent residents with their home location.	3.1 Conduct a fieldtrip to historic homes in the area.	3.1 BOZEMAN CHRONICLE, "Historic Homes," March 27, 1983, pp. 6-7; March 28, 1983, p. 4.	
	3.2 Using copy machine, duplicate pictures from CHRONICLE or elsewhere to include in booklet with appropriate resident.	3.2 Map, "Bird's Eye View of the City of Bozeman," 1898.	
	3.3 Arrange for a historical walking tour.		
4. Will associate residents with type and location of business.	4.1 On chart keep record of residences from above.	4.1 Experience chart.	
	4.2 Next to each, place pictures of their business associations.	4.2 Magazines, newspapers.	

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Create ideas for basic facts used in verbal problems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design verbal problems of addition about life forms.	1.1 Have student make three verbal problems using addition as basic fact. The sum must be four digit numbers. The context of the problems will refer to some type of life form, i.e., "In 1900 the city of Bozeman had a population of ____; Belgrade had ____ people, and Amsterdam had ____. How many people were there in the three towns?"	1.1 Paper, pencil, Montana almanac or current Montana road map with population figures.	1.1 Urge the students to remember key words for different operations: and-addition; how many more (less) than-subtraction; of-multiplication.

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Provide practice in basic computation skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Demonstrate competency in basic computation skills.	1.1 From newspaper advertisements, determine cost of meals for four people.	1.1 Current newspapers, menus of local restaurants.	
	1.2 Find difference between original price and sale price of an appliance.	1.2 Current newspapers.	
	1.3 Figure total cost of at least five diverse items.	1.3 Current newspapers.	
	1.4 Figure individual cost if nine people share equally the cost of two large pizzas.	1.4 Current newspapers.	

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Computing distances by referring to map.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will compute actual distances from map scale.	1.1 Determine map scale.	1.1 City map.	
	1.2 Teacher will explain procedure.		
	1.3 Compute distances using information from map.		

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Design story problems featuring price comparisons.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design story problems based on comparison of prices for comparable items.	1.1 Research newspaper advertisements, recording prices different stores offer on comparable items. 1.2 Design story problems comparing prices and computing differences.	1.1 Current newspapers.	
2. Design story problems demonstrating savings of buying in quantity.	2.1 Research newspaper advertisements, comparing price of one item vs. price of "3 for ____." 2.2 Design story problems, computing savings of quantity buying.	2.1 Newspapers.	
3. Demonstrate savings sale-buying can afford.	3.1 Research newspaper advertisements for sale items. 3.2 Design story problems figuring savings on sale items vs. regular price.	3.1 Current newspapers.	

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Understand process of making and counting change.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Set up a "grocery store" and simulate grocery shopping.	1.1 Bring form home empty cans that have been opened from the bottom to make can appear intact. Also bring other empty containers that could come from a grocery store. 1.2 Arrange these on shelves or tables to simulate store environment. 1.3 Price items realistically.	1.1 Opened cans (empty); empty food boxes (cereal, etc.); any small items (empty, good condition), that can be found in a grocery store. 1.2 Shelves or tables.	
2. Will perform as cashiers or customers.	2.1 Take turns acting as cashiers or customers. Each cashier may have assistant to total purchases. Calculator may be used. 2.2 Customers will bring purchase to cashier who will total the purchase.	2.1 Play money, pencil paper.	
3. Figure amount of change and count it in proper order.	3.1 Customer will use play money to pay for purchases. 3.2 Cashier will give customers change, counting from amount of purchase, starting with smallest coins and concluding with amount tendered, i.e., \$3.09, \$3.10, \$3.15, \$3,25, \$3.50, \$3.75, (or \$4.00), \$5.00.	3.1 Play money.	

ASSIGN. SCOPE OF LESSON STATEMENT Use graphs as a tool for illustrating economic and/or population growth of a city.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a bar graph illustrating size comparison of towns and cities.	1.1 Demonstrate on chalkboard example of bar graph and explain principle.	1.1 Chalkboard, chalk.	
	1.2 Determine population of towns in the Gallatin Valley.	1.2 Chamber of Commerce, Public Library.	
	1.3 Construct a bar graph depicting comparative sizes.		

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Develop concept of drawing to scale.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will prepare a scale drawing of object in room.	1.1 Show pictures of buildings and explain principle of scale drawing.	1.1 Pictures of buildings, preferably of buildings with which pupils are familiar.	
	1.2 Assist as pupils make scale drawing of object in room (teacher's desk, for example).		
2. Will prepare a scale drawing of a building.	2.1 Obtain measurements of selected building.		
	2.2 Decide on suitable scale and draw building to that scale.	2.2 Measurement of building, paper, pencil, ruler.	

MATH: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Reinforce skills for computing area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will demonstrate understanding of formula for computing area.	1.1 Determine map scale. 1.2 Have students explain formula for finding area.	1.1 City map.	
2. Will use formula and compute area.	2.1 Have students compute area of designated sections on the map, working as many examples as teacher assigns.	2.1 City maps.	

MATH/ART: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Introduce geometry as it relates to design.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify geometric shapes in a variety of designs.	1.1 Have class study wallpaper and floor covering samples will identify geometric examples.	1.1 Selected designs from wall paper sample book from a local store. Pictures of floor coverings from magazines or catalog.	1.1 Teacher will select ahead of time.
2. Will design a print for a floor covering.	2.1 Using geometric patterns, have pupils design a floor print.	2.1 Paper, pencil, ruler, compass.	

SCIENCE: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Explore difference in the meaning of migratory and permanent.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify migratory birds.	1.1 Distinguish between the terms migratory and permanent as pertains to birds.	1.1 Dictionary or encyclopedia.	
	1.2 List migratory birds that are associated with the Gallatin Valley.	1.2 Montana Department of Fish, Wildlife and Parks.	
	1.3 Plan field trip at appropriate time of year to identify migratory birds.	1.3 Notebook, pencil, bird guide book.	
	1.4 List as many migratory birds as can be identified.		

SCIENCE: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Discover which plants are indigenous to this area and which are imported.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define relevant terms.	1.1 Use dictionary to define indigenous and imported.	1.1 Dictionary.	
2. Will list plants with which they are familiar.	2.1 Have each pupil make a written list of plants with which he/she is personally familiar.	2.1 Paper, pencil.	
	2.2 Add to list by consulting teacher, parents, friends.		
	2.3 Working together, have pupils make an alphabetized master list of all plants on their individual list.	2.3 Paper, pencil.	
3. Distinguish between indigenous and imported plants.	3.1 By consulting resources, have students determine which plants are indigenous and which plants are imported.	3.1 Gallatin County Extension Service, MSU College of Agriculture. Cashman (or other) nursery, Forest Service.	
	3.2 Have students add to list through study of pamphlets and brochures obtained from Resources List.	3.2 Gallatin County Extension Service, MSU College of Agriculture, Cashman (or other) nursery, Forest Service.	

SCIENCE: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding of the most basic division of plants.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will recognize that most plants produce seeds.	1.1 Examine pictures of orange blossoms, daisy, and strawberry plants.	1.1 Pictures of orange blossoms, daisy, and strawberry plant or actual specimen if available. Elementary science books.	
	1.2 Identify the seed making part of the plants.		
	1.3 Tell where the seed making part of each plant is.		
	1.4 After recognizing that these three specimens all produce seed, together make a list of other plants which produce seeds.	1.4 Seed catalogs.	
2. Will identify some plants that do not produce seeds.	2.1 Brainstorm, "What other way can plants reproduce?"	2.1 Seed catalogs, elementary science books.	
	2.2 Together make a list of plants that do not produce seeds.		
3. Will identify the first division of classifying plants.	3.1 Discuss, "First division botanists make in classifying plants is between plants with seeds and plants without seeds."		
	3.2 Visit Cashman's Nursery (or other) and observe different plants of the two categories.	3.2 Cashman's Nursery, Heisell's Landscaping or Langhor's.	

SCIENCE: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Recognize important elements of animal care.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will identify basic needs of pet animals.	1.1 Initiate discussion concerning pet care.		
	1.2 Have pupils make a list of an animal's basic needs.		
	1.3 Allow for pupils to be given opportunity to relate personal experiences relating to animal care. (Try to keep them from it!)		
	1.4 Have pupils use library training and select from the library books on animal care.	1.4 School library, public library.	
2. Identify needs of a specific animal (pet).	2.1 Choose a specific animal (pet) and describe needed care, in either written or oral report.	2.1 Book from library. Information previously gathered.	
	2.2 Arrange for class will visit winter fair as fieldtrip.	2.2 Winter fair.	
	2.3 Ask 4-H guides for guidelines in caring for specific animals.	2.3 4-H guides.	

SCIENCE: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the effects of water erosion on landscapes.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Demonstrate effect of water on soil.	1.1 Find an area where soil can be pushed into a pile.	1.1 Shovel.	1.1 Find area ahead of time.
	1.2 Gently sprinkle soil with water.	1.2 Water source and pail or hose.	
	1.3 Using a water hose or pail of water, douse soil with water.		
	1.4 Engage students in dicussion of effects of the water on the soil.		
2. Recognize land changes due to erosion, particularly in ghost towns.	2.1 Discuss changes in ghost towns brought about by water erosion.	2.1 Photos of ghost towns during its prime and current photos, old newspapers.	
	2.2 Observe effects during fieldtrip to a ghost town.	2.2 Arrange fieldtrip to a ghost town (Gallatin City at Missouri River headwaters good choice for Gallatin area).	

SCIENCE: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Recognize contribution of electricity to Gallatin Valley.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. List early uses of electricity in Bozeman.	1.1 Discuss introduction of electricity to Bozeman.	1.1 BOZEMAN CHRONICLE, March 28, 1983, p. 12.	
2. List uses of electricity in pupils' homes.	2.1 Make a list of the ways electricity is used in pupils' homes.	2.1 Paper, pencil.	
3. List some industrial uses.	3.1 See how many industrial uses you can list.	3.1 Paper, pencil.	
4. Recognize hazards of electricity.	4.1 Using the kit supplied free of charge by Montana Power, study the hazards associated with electricity.	4.1 Montana Power Company kit.	
5. Demonstrate understanding of precautions to be observed.	5.1 Discuss precautions stressed in Montana Power kit. 5.2 Make a list of hazards and precautions to be observed. 5.3 Do experiments in the kit.	5.1 Montana Power Company kit.	

SCIENCE: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Become aware of the changes man has made in the environment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Contrast past and present land appearance.	1.1 From newspapers and magazines cut pictures depicting an area untouched by man.	1.1 Nature magazines, recreation magazines and brochures, wild life magazines, environmental groups.	
	1.2 Encourage and direct pupils in brainstorming, soliciting examples of what man has done to change the environment.		
	1.3 Cut out pictures illustrating physical change (buildings, farming, mines, timber cutting, roads, etc.), and changes that pollute (automobile, chemicals, petroleum products, woodburning, sewers, etc.).		
	1.4 Mount pictures into scrapbook, dividing according to category and label.		

SCIENCE: CITIES AND TOWNS - GRADE 5
ASSIGN. SCOPE OF LESSON STATEMENT Making a spore print.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Observe a spore print made from a mushroom.	1.1 Select a mushroom with a closed cap or one that has just begun to open.	1.1 Mushroom cap that has not opened (from the grocery store).	
	1.2 Break off the mushroom stem. Peel back the cap, exposing gills.		
	1.3 Place the cap, gill side down, on a piece of construction paper.	1.3 Construction paper, (light color).	
	1.4 Cover the cap with the jar. Do not disturb for 2-3 days.	1.4 Glass jar.	
	1.5 Carefully remove the mushroom cap. Observe the spore print made by the mushroom.		

ART: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Through geometric designs, recognize correlation between are and math.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use geometric shapes to create window display.	1.1 See Math Objectives and Activities, p. 5.		

ART: CITIES AND TOWNS - GRADE 5

ASSIGN. SCOPE OF LESSON STATEMENT Correlate social studies and art.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use art mediums and skills to develop Social Studies Objectives.	1.1 See Social Studies, p. 2. 1.2 See Social Studies, p. 4.		

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Government - Grade 6

READING: GOVERNMENT - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of our national government background.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will discuss the basis upon which our government was founded.	1.1 Initiate a discussion of the American Revolution as a result of a film strip presentation.	1.1 Filmstrip: AMERICAN REVOLUTION, District #7.	1.1 One hour.
2. Will list at least 3 causes of the American Revolution.	2.1 Research material which discuss the causes of the American Revolution.	2.1 Copies of the Bill of Rights, Constitution, Cobblestones, history books, encyclopedias, etc.	2.1 One hour.
3. List the major points of the Constitution.	3.1 Study the American Constitution and discuss its impact on our present way of life.	3.1 Individual copies of the Constitution and Bill of Rights. Listen to records that describe the process.	3.1 One hour.
	3.2 Utilize newspapers and magazines to develop a scrapbook which deals with government issues.	3.2 Several copies of current newspapers and magazines.	
4. List the major points of the Constitution and debate the advantages and disadvantages of the Constitution.	4.1 Debate format and rules.		4.1 Line up judges and arrange desks.

READING: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Create an awareness and understanding of Gallatin County History.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a time line which describes Gallatin County History.	1.1 Visit the Museum of the Rockies. Follow up with chart of accumulated information. 1.2 Using accumulated information, make a time line.	1.1 Schedule museum visit.	1.1 Be sure tour guide is available for students.
2. Utilize the newspaper to interpret our local history.	2.1 Analyze and share the information in the Centennial issue. 2.2 Listen to tapes which describe Montana's growth.	2.1 BOZEMAN CHRONICLE CENTENNIAL EDITION, 1983. 2.2 Reflections on Montana - Montana Humanities, U of M, Missoula (free upon request).	2.2 Address for ordering tapes.

LANGUAGE ARTS: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate an understanding of the governmental process throughout local history.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will re-enact a historical event.	1.1 Study the history of the dispute over the capital city between Helena & Bozeman and write a play.	1.1 County records of dispute.	1.1 1st session to gather information. 2nd session to write short play. 3rd session to practice. 4th session to perform.
	1.2 The students will then rehearse and present the play to other classes.		
2. Write individual "Bill of Rights".	2.1 Based upon National Bill of Rights students will write their own "Bill of Rights" which they would like to see adopted for Montana.	2.1 Copy of Bill of Rights. 2.2 Demonstration of proper format.	2.1 Provide appropriate paper.
3. Write and recite patriotic poems.	3.1 Write poetry in any style during any period of history and recite.	3.1 Copies of historical poetry.	
4. Create a progressive class story which describes our present form of government.	4.1 Invite a local historian to share stories with class.	4.1 Historical Society.	4.1 1 class period.
	4.2 Working in pairs, students will take different parts of story to research and write about.	4.2 Variety of Montana history books.	4.2 1 class period.
	4.3 Total class will share and final editing will take place.	4.3 Visit local downtown mural and attempt to interpret. (Visit with artist if possible).	4.3 1 class period.

LANGUAGE ARTS: GOVERNMENT - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate an understanding of the governmental process throughout local history (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
5. Memorize one selection which relates to an historical event.	5.1 After exposure to many resources, have students choose one to memorize and deliver to the class.		5.1 2 class periods.
6. Prepare and deliver a speech which explains a particular civic responsibility.	6.1 Invite a local civic club leader or lawyer to speak on patriotism.	6.1 Speaker from Chamber of Commerce (referral).	6.1 1 class period.
	6.2 Based upon speaker and reading, student will write personal speech and deliver it to classmates.		6.1 2 class periods (one for writing and one for delivery). Video taping would be recommended.
7. Select one local government official to interview.	7.1 Based upon interview, have students analyze and interpret the official's stand on two local issues.	7.1 Arrange interview through County Commissioners.	7.1 2 class periods (1/interview; 1/analysis).
8. Learn to use and demonstrate knowledge of Robert's Rules of Order.	8.1 Study Robert's Rules of Order.	8.1 Robert's Rules of Order - one copy per student.	8.1 One session.
	8.2 Run class meeting based upon Robert's Rules of Order.		8.2 One session.
9. Observe a trial at a local court.	9.1 Observe a jury trial in local area.	9.1 Check with local district court clerk for appropriate trial and schedule.	9.1 Arrange fieldtrip based upon previous trial schedule information.

LANGUAGE ARTS: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate an understanding of the governmental process throughout local history (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
10. Become acquainted with local senior citizen in an attempt to record our past local history.	10.1 Interview a local senior citizen and generate a written record of history/government from their recollections.	10.1 Hillcrest Retirement Home Contact Bertha Hall or Jerry Finn.	10.1 Make preliminary contacts with Senior Citizens to arrange interviews.
11. Compare the penal institutions of our history.	11.1 Visit the old jail and the new jail.	11.1 Contact the Gallatin County Historical Society to arrange a tour.	11.1 Arrange a two stop fieldtrip. Contact the necessary people Historical Society and Law and Justice Center.
	11.2 Upon returning to class, generate a list reflecting what was in the old and new facility. Make comparisons.		

MATH: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Develop statistical data which depicts local history.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a time line of local government.	1.1 Students will gather information for time line.	1.1 Multitude of books from designated list.	
	1.2 Groups will be assigned to cover different time periods.		
	1.3 Groups will combine their efforts and display their final time line in the hallway.	1.3 Senior citizen interviews	
2. Construct a picto-bar graph depicting the growth of governmental offices or positions.	2.1 Interview someone from Historical Society who could provide students with necessary information.	2.1 Hillcrest Retirement Center, Bertha Clow on resource list.	
	2.2 Organize information into statistical groups.		
	2.3 Develop picto-bar graph.	2.3 Social studies basal program.	
3. Write verbal problems concerning issues which may face local officials.	3.1 Study current issues facing local government.	3.1 Newspaper articles, clipped and collected by instructor.	
	3.2 Write verbal problems based upon above information.		3.2 Teacher provides guidelines for writing these problems - one/two step problems - which operations to use.
4. Write problems which relate to gold.	4.1 Research historical gold value.	4.1 Chamber of Commerce.	4.1 See 3.2 above.
	4.2 Compare with current gold prices and write problems.		

MATH: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Compare a variety of basic survival needs throughout history.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Compare lawyer fees of the past with the present.	1.1 Research lawyer fees both past and present. 1.2 Develop data from research into a statistical form which shows comparison.	1.1 Consult Bar Association for information.	
2. Compare the value of land, past and present.	2.1 Consult with local realtor to research land value. 2.2 Given the above information, students demonstrate by means of a bar graph, land values in 20 year increments.	2.1 Realtors Association.	
3. Depict the population growth of the valley from statehood to present time.	3.1 County auditor will be interviewed to obtain necessary data. 3.2 Develop a statistical report based upon above information.	3.1 Contact county auditor.	
4. Compare the occupational changes by comparing agricultural work with industrial work over the past 100 years.	4.1 Students will consult with county extention agent to gather information. 4.2 Will develop a color coded line graph of above information.	4.1 County extension agent, see resource list.	

SCIENCE: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Recognize the impact of climate on communication.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop an awareness of and discuss the impact of weather and climate upon communication.	1.1 Based upon previous reading, students will list a variety of consequences which take place as a result of climate.	1.1 Book list - variety in classroom.	
	1.2 Brainstorm results of 1.1 on flip chart and discuss as a total group.		
	1.3 Class discussion on the above information as it would affect communication and transportation.		
	1.4 Conclude with film, demonstrating impact of climate.	1.4 District #7 film catalog.	

SCIENCE: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Realize that resources have a definite impact on government decisions.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to an expert on local resources and map impact which that might have on government.	1.1 Have students listen to a guest speaker from the Department of Natural Resources and Conservation (or MSU expert), to learn about the major resources of the area.	1.1 County extension agent.	
	1.2 Given the above information, hypothesize what impact resources might have on governmental decisions.	1.2 Provide resource maps and materials depicting natural resources.	
	1.3 In teams of three, students will map on butcher paper with markers, how resources impact government issues and decisions.	1.3 Butcher paper, markers.	

SCIENCE: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Students will become aware of the impact of technology on government.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Role play a variety of situations that demonstrates how technology affects community decisions.	1.1 Based upon previous lessons have students divide into groups and prepare an oral presentation which describes different examples of how technology has affected community decisions historically.	1.1 County commissioners latest publication.	
	1.2 Following oral presentations, the students dramatize with visuals what might have taken place.	1.2 Art supplies.	
	1.3 Have students predict the impact of technology in the year 2010.	1.3 Emphasize important speaking skills; BOZEMAN CHRONICLE, CENTENNIAL ISSUE.	

SCIENCE: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Analyze the impact of science on agriculture.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Associate the impact of science on agriculture.	1.1 Study the agriculture of the area and, in so doing, show how science has changed the methods of agriculture.	1.1 Agricultural extension agent, resource list.	
2. Realize how governmental structures are affected by science through use of a comparative list of accomplishments.	2.1 Make a dual list which compares agricultural developments with scientific accomplishments.	2.1 Butcher paper, markers, magazines.	
3. Develop a mural which depicts how governmental structures are affected by science.	3.1 Based upon the above information, create a mural depicting scientific breakthroughs which changed the lifestyle and government of the people at different points in history.		

SCIENCE: GOVERNMENT - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Compare governmental structure by creating models.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design and develop a model of government, both past and present and draw conclusions.	1.1 Based upon Historical Society and Chamber of Commerce information, design models of government both past and present.	1.1 Museum of the Rockies, published material from county commissioners, BOZEMAN CHRONICLE CENTENNIAL EDITION.	
	1.2 Following the development of models, hypothesize and draw conclusions to explain the apparent change in governmental structure.		

SOCIAL STUDIES: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Compare governmental structure of past with present.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct charts of past and present governmental structure.	1.1 Divide into groups to study the CENTENNIAL ISSUE OF BOZEMAN CHRONICLE.	1.1 BOZEMAN CHRONICLE CENTENNIAL EDITION.	
	1.2 Based upon above information, construct a flow chart which demonstrates changes in governmental structure.	1.2 Provide examples of flow charts.	
	1.3 Upon examination of flow charts, conclusions will be developed based upon comparison of the previous mapping.		1.3 Each student could verbally explain his/her flow chart if time permits.

SOCIAL STUDIES: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Students will understand the impact of population on local government.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Graph the population growth of Gallatin County, utilizing more than one graph format.	1.1 Based upon County Clerk and Recorders, do a variety of graphs which depict population group will do picto-graph, another bar-graph and another circle graph.	1.1 Copy of necessary records from County Clerk and Recorder.	
		1.2 Provide a variety of graphs as examples.	
		1.3 Stress accuracy.	

SOCIAL STUDIES: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Students will learn to write a formal research paper.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a formal research paper.	1.1 Teach the necessary steps for writing a formal research paper.	1.1 Research Report Unit, John Graves, Monforton School.	
	1.2 Given the above experience, have the students select one famous governmental leader construct a rough draft his/her life.	1.2 Public library card catalog.	
	1.3 Rough draft will be discussed.		1.3 Stress spelling and penmanship.
	1.4 Final draft of research paper will be written.		

SOCIAL STUDIES: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Students will be able to evaluate a historical dispute.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Communicate (debate and discuss) the details of a historical event, including causes of the dispute.	1.1 Research the dispute over the site of the state capitol.		
	1.2 Given the above information, have students debate the issue.		
	1.3 Formal debate will be video-taped and judges will be carefully selected.	1.3 Video camera, blank tape, video machine.	1.3 Arrange for judges.
	1.4 Have class critique the video tape of the debate.		

ASSIGN. SCOPE OF LESSON STATEMENT Students will experience speaking as a method of communication.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Present a 2-4 minute speech of a governmental nature without notes.	1.1 Teach the STEP speech method.	1.1 Program designed and taught by Nancy Vandeventer (Bozeman Junior High). Workshop and materials available.	
	1.2 Given the above experience, have students deliver a 3 minute acceptance speech as though they had just been elected as county commissioner.		
	1.3 Invite county commissioner to speak to students about duties and responsibilities.	1.3 Contact county commissioners to arrange speaker.	

SOCIAL STUDIES: GOVERNMENT - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Students will develop an understanding of the impact of geography upon government.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Brainstorm how geography of an area influences governmental structures.	1.1 Reproduce a map of all Montana counties and designate natural boundaries.	1.1 Provide materials for maps, Montana history book, several on resource list.	
	1.2 Based upon the above information have students hypothesis or infer the variety of ways in which geography has influenced governmental structure.		
	1.3 Have students conclude by writing a coherent essay expressing their findings.		1.3 Stress writing skills.

ART: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Students will realize the symbolism which exists in state flags.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Associate the symbols on state flags with their meanings.	1.1 Research the meaning of the Montana State Flag.	1.1 Chamber of Commerce guest speaker to lecture on meaning of flag.	
	1.2 Given the above information, have students explain the local symbols which contributed to the state flag.		
	1.3 Draw the Montana and other state flag symbols and label the meanings.		

ART: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Investigate the architecture of our early history.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Students will duplicate the architecture of our earliest government structures.	1.1 Study early architecture through photographs.	1.1 Bistro Restaurant Photographs, Chamber of Commerce, Museum of the Rockies.	
	1.2 Given the above information, have students recreate in black and whites drawings, our early governmental structures.		
	1.3 Share drawings with fellow students by means of a formal showing.		
2. Given lesson #1, students will compare their reproductions with present day architecture.	2.1 Illustrate differences in architecture by means of contrasting historical architecture with present day architectural drawings.		2.1 Refer to 1.1 above.
	2.2 Demonstrate differences by contrasting a drawing of the old jail with a drawing of the new jail.		2.2 Montana Historical Society will arrange tours of both.

ART: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Students will appreciate our early local artists.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Students will report in writing the contribution of artists, past or present.	1.1 Have each student select a different local artist (past or present) to research. 1.2 Write a brief report on a selected artist and share that information with the rest of the class.		1.1 Book list, resource list.

ART: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation of local art history.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will make a poster reflecting one aspect of local art history.	1.1 Analyze the impact of ghost towns on local art.		1.1 Several different books.
	1.2 Demonstrate an awareness of local art history by creating a poster which depicts an historical event; i.e., Centennial, Sweet Pea, etc.		1.2 Chairman of Sweet Pea Festival would recommend resources.

ART: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Develop interpretation and appreciation of political cartoons.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Students will be able to interpret a variety of political cartoons and ultimately will be able to create their own political cartoons.	1.1 Explore with class a variety of political cartoons and students will discuss them.	1.1 Newspapers.	
	1.2 Given the above experience, have students collect and interpret political cartoons over a time period.	1.2 Newspapers.	
	1.3 Create and illustrate their own political cartoon which will be interpreted by classmates.		

MUSIC: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Investigation of a patriotic song.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Students will be able to write the lyrics to a patriotic song.	1.1 Given our local history, have students work in groups to develop a patriotic song. 1.2 In conjunction with music teacher, have students compose music and sing patriotic song as a group. 1.3 For extra credit some students may wish to write a song about a past or present political happening.		1.1 Book list, resource list. 1.2 Make plans with music teacher.

MUSIC: GOVERNMENT - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Students will summarize the history of our local area through music.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Students will trace local history through music and demonstrate their understanding of it by discussing its impact upon patriotism.	1.1 Study a variety of civic bands, parades, etc., in an attempt to understand their impact on local history.		1.1 Book resource list
	1.2 Given the above information, have students appreciate how music has contributed to our local history.		
	1.3 Interview local civic groups to understand the role which music played in preserving and unifying our local history.		1.3 Elks Club, Veterans Assoc.
	1.4 Conduct a class discussion concerning the importance and impact music has had on their lives and ultimately history.		

HEALTH AND PHYSICAL EDUCATION: GOVERNMENT - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Physical conditions which contributed to development of our present society.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Students will research and re-enact typical physical fitness games from the past.	1.1 Through research, have students study and re-enact past physical activities which have contributed to survival of our culture as it exists today.		
	1.2 Create a physical game which depicts our present governmental structure.	1.2 Book list, resource list.	
	1.3 Physical fitness was a survival technique which enabled our society to survive within our climate limitations. Develop a physical fitness program which would allow its citizens to continue to meet it's everyday challenges.		
	1.4 Have students participate in a physical fitness program which they developed for a given period of time.		

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Life Styles - Grade 6

READING: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Understand how gold discovery drastically and forever changed lifestyles.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will review and be able to discuss pre-gold rush lifestyle.	1.1 Initiate discussion of fur-trapper, and early pioneer homes.	1.1 Chalkboard - note facts on board.	
	1.2 Generate list of how food was obtained.	1.2 Chalkboard; notepaper; pencil. MONTANA IN THE MAKING, Abbot, Newton Carl.	1.2 Old Montana History textbook, now out of print.
	1.3 Initiate discussion of mobility of early settlers and reason for this lifestyle.	1.3 TREASURE STATE, Henry, Ralph C. Student notes.	
2. Will comprehend and develop a chart depicting immobile groups vs. smaller mobile individuals.	2.1 Initiate discussion on what these demands would be.	2.1 MONTANA IN THE MAKING TREASURE STATE.	
	2.2 Read to find out differences in pre & during gold rush lifestyles.	2.2 Mt. Historical Society magazine. BOZEMAN CHRONICLE, Centennial Ed.	
	2.3 Generate chart citing differences in lifestyles pre and during gold rush lifestyles. Make wall hanging, and copy in notebook.	2.3 Notes, discussions, MONTANA IN THE MAKING TREASURE STATE, See 1.2, 1.3.	
3. Will experience loss of independent lifestyle by addition of huge numbers of people.	3.1 Role play: fur-trapper or lone miner invaded by many individuals seeking gold.	3.1 Notes, paper, pencil.	
4. Will formulate a solution to conflicts. Format newspaper.	4.1 Compose newspaper article to resolve differences.	4.1 BOZEMAN CHRONICLE, Centennial Ed.	
5. Will comprehend & outline why once change occurs, returning to old ways is impossible.	5.1 Study, through research, ghost towns. Outline findings.	5.1 Johnson, Dorothy M., THE BLOODY BOZEMAN: THE PERILOUS TRAIL TO MT'S GOLD. 978.6, J626. Miller, Don C., GHOST TOWNS OF MT. 978.6, M61g Notebook, pencil.	

READING: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT 1. Develop understanding of need for development of ranches.
2. Develop understanding of how ranch sites were chosen.
3. Evaluate positive aspect of gold rush.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will define and outline need leading to development of cattle ranches as community resource.	1.1 Read book to students, discussing as read.	1.1 THE GREATEST CATTLE DRIVE, (Nelson story), Wellman, Paul I., 978, W469. BOZEMAN CHRONICLE, Centennial Ed. Notebook, pencil.	
	1.2 Generate discussion on needs as presented by mining towns.		
	1.3 Begin outline on Development of Cattle Ranching: Positive/Negative Results.		1.3 Suggested that the teacher outlines main topics desired from students to guide their work.
2. Will describe and outline needs of ranchers, and cattle to live.	2.1 Read book or related pages.	2.1 FREE GRASS TO FENCES: THE MT. CATTLE RANGE STORY, Fletcher, Rob't H., 978.6, F63f Speaker: local rancher.	2.1 Obtain names of those in your area who can be guest speakers to class.
3. Will interpret need of rancher and and community charting and outlining findings.	3.1 Study map of area to locate suitable areas for raising cattle.	3.1 Topographic map per child, copied from MT IN MAPS, Taylor, Robert L., 917.86, T21m.	
	3.2 Make chart for wall, outlining needs of rancher, cattle, consumer.	3.2 Chart, marker.	
	3.3 Fill in blank map of early area ranches.	3.3 Map, pencil.	
	3.4 Complete outline.		

READING: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT
1. Develop understanding of need for development of ranches.
2. Develop understanding of how ranch sites were chosen.
3. Evaluate positive aspect of gold rush (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
4. Will evaluate positive/negative results of ranching, culminating in class debate.	4.1 Initiate discussion leading to stated goals: economic growth; frontier development; more land gained for U.S. government, etc.	4.1 Notes, outline, (See 1.2).	
	4.2 Debate positive/negative aspects.	4.2 Notes (See 1.2). Readings, interviews with local ranchers for personal views. WE POINTED THEM NORTH: RECOLLECTIONS OF A COWPUNCHER, Abbott, E.C. & Smith, Helen, H., Ab 25a. FREE GRASS TO FENCES: THE MONTANA CATTLE RANGE STORY, Fletcher, Robert H., 978.6, F63f TRAILS PLOWED UNDER, Russell, Charles M., F 909t. Native American Resources, MSU Library.	
5. Will write a position paper stating personal feelings on effect of gold rush/ranching on Gallatin County.	5.1 Silent reading and review of notes taken. 5.2 Individual conferences with teacher, if necessary.	5.1 Notes, memory, teacher/student talk, if needed.	5.1 Refer to Reading: Lifestyles - Grade 6 Page 2, Objective 5.

READING: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding of 1) how ghost towns developed; 2) how ghost towns teach us now, and 3) why Gallatin County has few ghost towns.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will discover and then outline possible steps that show how once prosperous, booming towns became "ghost" towns.	1.1 Study patterns of growth based on gold discoveries.	1.1 See Reading: Lifestyles Outline.	
	1.2 Read GHOST TOWNS OF MONTANA	1.2 Miller, Don C., 978.6, M61g	
	1.3 Class discussion of why miners moved.	1.3 Readings, notes.	
	1.4 Develop outline topics - students will fill in rest of outline.	1.4 Chalkboard, chalk, paper, pencil.	
2. Will present an oral report on a Montana ghost town.	2.1 Assign individual reports, based on choice of town to be studied, each report different.	2.1 GOLD CAMP: ALDER GULCH AND VIRGINIA CITY, Barsness, Larry, 978.6, B28j SHALLOW DIGGIN'S: TALES FROM MONTANA'S GHOST TOWNS, Davis, Jean, 978.6, D29s GHOST TOWNS OF MONTANA, Miller, Don C., 978.6, M61g MONTANA PAY DIRT: A GUIDE TO THE MINING CAMPS OF THE TREASURE STATE, Wolle, Muriel Sibell, 917.86, W83m.	
	2.2 Give oral reports to class.		
3. Will evaluate and discuss why Gallatin County does not have mining ghost towns.	3.1 Discuss findings of earlier data in this lesson: 1) how ghost towns come to be; 2) occupations of ghost towns.	3.1 Notes, readings.	
4. Will evaluate and discuss how dying towns in one area cause growth in another area.	4.1 Conduct a discussion on causes of businesses moving: a) when customers are gone; b) when other areas have potential customers.	4.1 Pen, paper, chalkboard.	
5. Will evaluate and write report on how ghost town teaches us today.	5.1 Arrange for a field trip to ghost town.	5.1 Transportation, chaperones, lunch.	
	5.2 Write report on visit: how ghost town teaches and what each learned.	5.2 Pape,; pencil.	

LANGUAGE ARTS: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Generate a "Dictionary of Terms for Gold Mining."

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will comprehend and list how new terms or how words develop with new occupations or altered lifestyles.	1.1 Generate list of new terms based on mining, occupations, living arrangements.	1.1 See Reading: Lifestyles - Grade 6, p. 1, Objectives 1-5. Pencil, paper, chalkboard, chart paper.	
2. Will write and perform a play to demonstrate the need for one source on language usage.	2.1 Conduct a class discussion on problems arising from misuse of terms.	2.1 Personal experience.	
	2.2 Write short play, comedy, that illustrates language puns that occur.	2.2 THE IMPORTANCE OF BEING EARNEST, Wilde, Oscar. Malapropisms.	
	2.3 Performance of play, see 2.2.	2.3 Audience.	
3. Will locate and study new terms in present day dictionary.	3.1 Using list of new terms, will look up date of usage. Examples: nuclear weapon, Sputnik, star wars weapon, awesome, ATV.	3.1 Webster's UNABRIDGED DICTIONARY.	
	3.2 List from teacher, paper, pencil.		

LANGUAGE ARTS: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop 1) self-expression abilities; 2) evaluating situation changes as they relate to all people.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will develop ability to express own feelings, and reactions in writing, and will comprehend different reactions to same situation depending on personal perspective.	1.1 Role play: a. hearing of a cattle drive; b. as child; c. as homesteader; d. as miner; e. as store owner.	1.1 Outlines, notes, readings, class chart, notebook, pencil.	1.1 See Reading: Lifestyles - Grade 6 p. 4, Objective 4. See Reading: Lifestyles - Grade 6 p. 3, Objective 3.
	1.2 Discuss observations of 1.1.		
	1.3 Journal entry on one perspective.	1.3 Notebook, pencil.	
	1.4 Role play seeing cattle drive: a. as child; b. as homesteader; c. as miner; d. as store owner.	1.4 Notes, outlines, readings, class chart, outlines.	
	1.5 Discuss observations of 1.4.		
	1.6 Journal entry on one perspective.	1.6 Notebook, pencil.	1.6 This lesson easily covers 1 week, as each perspective changes as environment changes.
	1.7 Role play the leaving of a cattle drive: a. as child; b. as homesteader; c. as miner; d. as storeowner.	1.7 Readings, class chart, outlines, notes.	1.7 Child should stay with a perspective chosen for length of lesson.
	1.8 Make journal entry on one perspective.	1.8 Outlines, notes, readings, class charts.	

LANGUAGE ARTS: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop outlining skills as resource for report writing.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will comprehend value of outlining as resource for report.	1.1 Evaluate own outline: good resource, why? poor resource, why?	1.1 Outline.	
2. Will utilize outlining skills in writing a report.	2.1 Assign report on: a.) How Gold Mining Forever Changed Montana. b) Ranching: Positive/Negative Results and c) How Ghost Towns Happened.	2.1 Paper, pencil.	2.1 See Reading: Lifestyles - Grade 6 p. 2, Objective 5; p. 3, Objective 2, 3; p. 4, Objective 5; p. 5, Objective 1.

MATH: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Comprehend: 1) value of dollar in relation to earnings.
2) value of items in direct relation to demand.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will comprehend that cost of necessary items is directly related to amount of earnings.	1.1 Read cost of specific items: Shoes, pants, dress, coat, hat, underclothing in old and current catalogs.	1.1 Old catalog, current catalog.	
	1.2 Spend $100.00 in each, for specific items.	1.2 Paper, pencil.	
2. Will comprehend how demand based on desire determines cost of item.	2.1 Discuss luxury items today & cost. Discuss necessities and cost.	2.1 Newspapers, magazines, catalogs.	
	2.2 Read cost of luxuries in old magazines, paper, catalogs.	2.2 Old newspapers, old magazines, old catalogs.	
	2.3 Chart cost of luxuries and necessities.	2.3 Charting paper, pencil.	
	2.4 Make line graph based on chart, see 2.3.	2.4 Graph paper, pencil.	

MATH: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Create verbal problems using all four operations: addition, subtraction, multiplication, division.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will design verbal problems, using all four operations, spending $100.00, and solve the same.	1.1 Write 3 verbal problems, using equations and 2 or more operations, based on $100.00 to spend.	1.1 Old magazines, old newspapers, old catalogs, paper, pencil.	1.1 Can follow-up this lesson with storekeeping role playing; i.e., giving change.
	1.2 Write 1 problem involving spending and change received. Example: John Bozeman's wife needed 100# flour, 1# salt, material. She had $100.00. Flour costs $20.00 for 50#; sugar costs $5.00 for 1#; salt costs $14.00 for 1#. The store had no material, but a catalog did. 2 yds of flannel for $5.75. How much change would she get if she bought all the food items? Can you solve the material problem? Why or why not?	1.2 Paper, pencil.	

MATH: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend historical events in relation to time.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will construct a time line demonstrating comprehension of how gold rush era over period of time brought about irreversible lifestyle changes.	1.1 Design time line showing gold rush era over 25 year period.	1.1 Charts, MONTANA IN THE MAKING, Abbott, Newton Carl. TREASURE STATE, Henry, Ralph C.	1.1 See Reading: Lifestyles - Grade 6 p. 1-2, Objectives 1-5 p. 2-3, Objective 1-5.
	1.2 Add development of ranches to 1.1 time line, over 25 year period.	1.2 Charts, outline.	

SCIENCE: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding that ranching/grazing changes vegetation of an area, with resulting need for control.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will take organized notes on how introduction of cattle changed vegetation growth.	1.1 Field trip to compare vegetation on grazing land and non-grazing land.	1.1 Local ranches, local front yards or other non-grazing area.	
	1.2 Make written observations of findings while on trip.	1.2 Journals, pencils.	
	1.3 Class discussion of observations. Chart these or write on board.	1.3 Individual notes.	
2. Will debate the pro's and con's of various grazing policies.	2.1 Class discussion on impact of open, non-controlled grazing.	2.1 Notes.	
	2.2 Class discussion on the necessity for control of grazing.	2.2 FREE GRASS TO FENCES: THE MONTANA CATTLE RANGE STORY, Fletcher, Robert H. Interviews of local ranchers/farmers.	2.2 See Reading: Lifestyles - Grade 6, p. 3, Objective 2.
	2.3 Conduct class debate on issues of open and restricted grazing.		

ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding of how introduction of machinery in farming changed environment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will discuss how man affects environment, with or without machines.	1.1 Generate discussion on 1800's style of ranching to show how environment changes occured, but were few.	1.1 Native Americans, MSU. THE INDIAN IN AMERICA, Washburn, Wilcomb, E. TREASURE STATE, Henry, Ralph C. MONTANA IN THE MAKING, Abbott, Newton, Carl.	
2. Will research history of machine development: why? how?	2.1 Read to find how machines were first used, when used.	2.1 "F" encyclopedia for dates.	
	2.2 Chart changes to show priority of machine development.	2.2 Chart paper, pencil.	
	2.3 Add to time line dates of machinery inventions.	See Mathematics: Lifestyles - Grade 6, p. 3, Objective 1.	
	2.4 Create a time line from introduction to present.	2.4 Chart paper, pencil.	
3. Will invent a simple machine that speeds up completing work.	3.1 Invent a simple machine that speeds up completion of work in the classroom.		
4. Generate a hypotheses: why mechanical inventions affect web-of-life changes.	4.1 Read current newspaper articles on unusual animal behavior.	4.1 Current newspapers, magazines.	
	4.2 Generate discussion as to how machines helped cause changes.	4.2 Definition of hypothesis.	
	4.3 Formulate hypothesis and chart it.		

SCIENCE: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the relationship between geology of an area and industry.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will write short paper paragraph showing the relationship between geology and commerce; i.e., gold mining, coal mining.	1.1 Read about geology of various gold mining areas: Montana, California, Nevada, Africa.	1.1 Encyclopedias.	
	1.2 Class discussion on similiar geologic formations.	1.2 Notes.	
	1.3 Read about geology of coal mining areas:	1.3 Encyclopedias.	
	1.4 Class discussion on similiar geologic formations and occupations there.		
	1.5 Formulate hypothesis on geology and commerce.	1.5 Notes.	
	1.6 Write short paper showing the relationship between geology and commerce.	1.6 Paper, pencil.	

SOCIAL STUDIES: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Understand how lifestyles changed as modernization occured.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will discuss why change must occur in a growing society.	1.1 Review facts learned in reading about gold rush.	1.1 Notes from reading.	1.1 Refer to Reading: Lifestyles - Grade 6, p. 1-2, Objectives, 1-4.
	1.2 Review wall chart on changes during gold rush.	1.2 Notebook charts made.	
	1.3 Review newspaper articles written in reading.	1.3 Notebook, newspaper articles.	
	1.4 Generate discussion on modernization seen during own lifetime.		
2. Will discuss and write a paper reflecting lifestyle changes that occur as society modernizes.	2.1 Read LITTLE HOUSE ON PRAIRIE series. Assigning various books/chapters to be reported on.	2.1 LITTLE HOUSE ON PRAIRIE series, Wilder, Laura Ingalls.	
	2.2 Class discussion on how society differs now from Wilder books, write changes noted on board.	2.2 Wilder readings and reports.	
	2.3 Creative writing: "How you think our society will change based on: advances in space travel; development of nuclear weapons or freeze; current topics of interest in the news".	2.3 Class discussions on subjects assigned. Books on topics chosen; magazine or newspaper articles on subjects chosen.	

SOCIAL STUDIES: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend patterns of population growth.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will comprehend and outline why settlements grew in certain areas, and not in others.	1.1 Study MONTANA IN MAPS, (either xeroxed copies for each child or books).	1.1 MONTANA IN MAPS, Taylor, Robert L., 912.786, T21m.	1.1 Refer to Science: Lifestyles - Grade 6, p. 3, Objective 1.
	1.2 Class discussion on reasons why growth noted in certain areas. Record reasons on chart.	1.2 Notebook, pencil, chart.	
	1.3 Study population maps of any country of teacher's choice (Russia is good one) to observe areas of population growth.	1.3 Encyclopedia.	
	1.4 Outline on the areas of population growth and the reasons for this growth.		1.4 Refer to Language Arts: Lifestyles - Grade 6, p. 3, Objective 1.

SOCIAL STUDIES: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Develop map reading skills.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will refine map reading skills by making own map, key, symbols.	1.1 Review MT IN MAPS, Taylor, Robert L.	1.1 MONTANA IN MAPS, Taylor, Robert L., 917.86, T21m.	1.1 Refer to Reading: Lifestyles - Grade 6, p. 3, Objective 3.
	1.2 Read map showing location of Native Americans in Montana.	1.2 Native American Studies, MSU/OPI.	
	1.3 Draw map of Monana.	1.3 Paper, pencil.	1.3 Refer to Science: Lifestyles - p. 3, Social Studies: Lifestyles p. 2. Objective 1.
	1.4 Fill in settlement areas for Gallatin Valley based on occupations.		
	1.5 Fill in areas of Native American settlements in the state.		

ART: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding of Native American crafts.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discover and discuss color, texture, mediums used by Native Americans.	1.1 Study Native American artifacts.	1.1 OPI - trunk of artifacts.	1.1 Utility of artifacts is a key here.
	1.2 Discuss shapes, colors, mediums used.		
	1.3 Read on Native American culture and religious beliefs.	1.3 Great Falls Public Schools Unit on MT History refer to resource list for address.	
	1.4 Field trip to Museum of Rockies.	1.4 Transportation, chaperones.	

ART: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding of Native American crafts: mediums, colors, designs.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will create sample of Native American artifact to develop appreciation of skill involved.	1.1 Collect vegetation for dyes.	1.1 Berries, beets, nuts.	
	1.2 Make and test dyes on material.		
	1.3 Dye yarns.	1.3 Yarn (white or bleached).	
	1.4 Sketch pattern design. Discuss limitations of colors.	1.4 Paper, pencil, book or pictures of typical Native American designs. Native American Studies, MSU. OPI Artifacts trunk.	
	1.5 Weave pattern of choice.	1.5 Loom: small wooden or cardboard square with nails or pins on 4 side edges.	

ART: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunity for artistic expression using medium of dough.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will create physical maps of area reflecting physical relief, settlement areas.	1.1 Refer to maps drawn of occupation/ Native American settlement areas.	1.1 Maps made in Social Studies.	1.1 Refer to Social Studies: Lifestyles - p. 3, Objective 1.
	1.2 Mix dough for map making.	1.2 Relief mixture: 3 parts salt, 1 part flour. Mix with water for consistency you need.	1.2 Any dough recipe will do - if experience has proven it.
	1.3 Make map.	1.3 MONTANA IN MAPS, Taylor, Robert L., 912.786, T21m Social Studies map, 1.1.	
	1.4 Paint in areas to match key.	1.4 Poster paints.	

MUSIC: LIFESTYLES - GRADE 6

ASSIGN. SCOPE OF LESSON STATEMENT Develop appreciation for cultural differences in music.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Observe and listen to local ethnic songs and folkdancers.	1.1 Invite local ethnic groups to visit and perform songs/dances.	1.1 Native American Studies, MSU Dutch Dancers, Manhattan Christian School, Manhattan, MT. Foreign Exchange Students, Bozeman High School/MSU.	1.1 Refer to Music: Lifestyles - Grade 6, p. 2. objective 1.
	1.2 Write thank you letters to visitors.		1.2 Can review or introduce letter writing unit in Language Arts.

MUSIC: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Will appreciate cultural differences in this medium.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn and participate in a dance activity.	1.1 Learn dance from Native American culture.	1.1 Dance instructions by visiting group.	1.1 Refer to Music: Lifestyles - Grade 6 p. 1, Objective 1.
	1.2 Learn dance from another culture represented in Gallatin Valley.	1.2 Dance instructions from visiting group.	

ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding that rhythmical concepts vary in cultures.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify instruments used in a musical composition.	1.1 Listen to recording of Native American music.	1.1 Record of Native American songs. MSU Library, Bozeman Public Lirary.	1.1 Refer to: Music: Lifestyles - Grade 6, p. 2, Objective 1.
	1.2 Identify sounds by instruments used.		1.3 Native American instruments can be made in Art lesson.
2. Play Native American instruments.	2.1 Using Native American instruments play or imitate sounds.		

HEALTH AND PHYSICAL EDUCATION: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend that different cultures vary in care of elderly.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will discuss that within ethnic groups the aging process is viewed differently.	1.1 Generate discussion of how our culture treats grandparents.		
	1.2 Emphasize that within our culture different answers are employed: nursing homes, church homes, living with children.	1.2 Local elderly in the community. Nursing homes in area.	
	1.3 Read story about Native American care of elderly.	1.3 ANNIE AND THE OLD ONE, Miles, Miska. GATEWAYS, Reader, Houghton Mifflin, Publishers.	
	1.4 Discuss basic needs of the elderly.	1.4 Gallatin County Dept. of Health pamphlets.	

HEALTH AND PHYSICAL EDUCATION: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend that all cultures don't have same diseases.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will write answers to teacher prepared questions that interpret: with settlement by Europeans, Native Americans were exposed to new, and deadly diseases.	1.1 Read to students facts on health of Native Americans prior to arrival of Europeans.	1.1 THE INDIAN IN AMERICA, Washburn, Wilcombe, pp. 104-105.	
	1.2 Note taking on varying facts: no "colds" known in Native American culture; small pox was not part of Native American culture; dangers to settlement of new lands etc.	1.2 Paper, pencil.	
	1.3 Answer questions, in writing, written by teacher on subject.	1.3 Paper, pencil.	

HEALTH AND PHYSICAL EDUCATION: LIFESTYLES - GRADE 6
ASSIGN. SCOPE OF LESSON STATEMENT Experience and learn Native American game; i.e., 3 legged race.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will cooperate with partner in competing against another team.	1.1 Two children are teamed and "inside" legs are tied together.	1.1 Cotton scarf or rope.	
	1.2 Each team competes against another in distance racing; i.e., 50 feet/ 100 feet.	1.2 Race area with boundaries marked off.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Ecology - Grade 7

READING: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Introduce and develop the concept of ecology.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define and understand the term ecology.	1.1 Read aloud to class WUMP WORLD.	1.1 WUMP WORLD, Peet, Bill, Houghton Mifflin. Copy on file Teachers' Resource Center.	1.1 Refer to Reading: Ecology - Grade 7, p. 2, Objective 1B.
	1.2 Initiate a discussion on ecology and develop a working definition.		
	1.3 Have students define definition of ecology using a dictionary.		

READING: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Develop awareness of the process that is followed before a major change is made in an environment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify the components of an environmental impact statement.	1.1 Define for students what an environmental impact statement is and why it is done.		
	1.2 Students will read an impact statement done on a local area.	1.2 Impact statements on local area: Big Sky, Ski Yellowstone, Bridger Canyon (public library).	
	1.3 Students will identify components of an impact statement.		
	1.4 Students will discuss the results of the impact statement.		
2. Write an environmental impact statement.	2.1 Students will write an impact statement, written by "Wumps," concerning impact of pollutions.	2.1 Pencil, paper.	2.1 Refer to Reading: Ecology - Grade 7, p. 1, Objective 1.

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of local ecological issues.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Select and read articles on local ecology.	1.1 Students will select, read and orally report on articles found in newspapers, magazines or on the news.	1.1 Newspapers, magazines.	
	1.2 Students will display articles on bulletin board.	1.2 Bulletin board.	
2. Listen and respond to representative of Fish & Game.	2.1 Students will prepare questions for representative of Fish and Game in advance.	2.1 Pencil, paper.	
	2.2 Speaker will address students on relationships between organisms and their interaction with the environment. Also, speak on man's place in ecosystem and his impact.	2.2 Representative from local Fish & Game Dept.	

READING: ECOLOGY - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT
1. Research an animal native to students environment.
2. Review process of writing a report.
3. Prepare written reports.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Research a topic using various reference materials.	1.1 Have various reference materials students can use for research available.	1.1 Magazines, encyclopedias, books on animals native to community.	
2. Review process of writing a report.	2.1 Review process of writing a report using an outline.		
	2.2 Review proofreading techniques.		
3. Write a report on teacher selected topic, following report format provided.	3.1 Students will research an animal native to local community.		
	3.2 Students will write an outline rough draft, to be edited for a final draft.		
	3.3 Write final draft of report.		

LANGUAGE ARTS: ECOLOGY - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT 1. Provide an opportunity to formulate and express own opinion.
2. Review business letter format.
3. Assist in development of a play.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Express and substantiate an opinion in correct letter format.	1.1 Discuss pros and cons of local ecology issue.		
2. Write a business letter using correct format.	2.1 Review business letter format. 2.2 Write a letter to the editor of local newspaper expressing opinion on local issue.	2.1 Letter format. 2.2 Pencil, paper.	
3. Express, in dialogue or play form, an opinion on a local environmental issue.	3.1 Students work in groups of 4. 3.2 Students develop a commercial for television that makes a statement on an issue. 3.3 Students perform commercial.	3.2 Any props necessary for performance.	

LANGUAGE ARTS: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Generate creative stories and poems using ecology as the theme.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a haiku written about something in the local environment.	1.1 Brainstorm for possible elements in local environment to use as a topic to write on. Write topics on board. Continue for verbs, adjectives, etc.		
	1.2 Display examples of haikus.	1.2 Examples of haiku.	
	1.3 Review format for haiku.	1.3 Format for haiku on board or chart.	
	1.4 Students will write rough draft of haiku.	1.4 Paper, pencil.	
	1.5 Students will proofread for spelling errors, correct form, etc.		1.5 Refer to Art: Ecology - Grade 7, p. 3, Objective 1.
2. Write a animal story for primary children using story starter.	2.1 Have animals native to local environment on cards and distribute.	2.1 Cards with native animals.	
	2.2 Review elements of a good story.		
	2.3 Review vocabulary appropriate for primary children.		
	2.4 Students write a fantasy about animal given to them.	2.4 Pencil, paper.	2.4 Refer to Art: Ecology - Grade 7, p. 4, Objective 1.

LANGUAGE ARTS: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Provide an opportunity for students to listen to and participate in a panel discussion.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop, participate in and evaluate a panel discussion.	1.1 As a class, develop and draw a mural of the "perfect" place in nature. Include both landforms, flora and fauna.	1.1 Large butcher paper, magic markers.	
	1.2 Propose a hypothetical situation where man plans to develop their natural paradise.		
	1.3 Divide the class into 3 groups. Group 1 - pro development; Group 2 - anti development; Group 3 - develop questions for panel and are judges. Develop format for evaluation.		
	1.4 Group 1 prepares platform for pro development. Group 2 prepares platform for anti development both referring to mural and its ecosystem.		
	1.5 Students present panel discussion to Group 3 and another class of students.		
	1.6 Group 3 will ask questions of the panel and evaluate each group.		1.6 Refer to Language Arts: Ecology - Grade 7, p. 6, Objective 1.

LANGUAGE ARTS: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Develop an environmental impact statement.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write an environmental impact statement.	1.1 Divide class into 2 groups - anti development of imaginary environment and pro development.		1.1 Refer to Reading, Ecology, Grade 7, pg 2, Objective 1; also Refer to Language Arts: Ecology - Grade 7, p. 3, Objective 1.
	1.2 Pro and anti development groups will develop a hypothetical environmental impact statement concerning environment mentioned on Language Arts, p. 3.		
	1.3 Students will prepare impact statement in written form and present to the class. (Students have reviewed actual impact statement in Reading Lesson p. 2.		

LANGUAGE ARTS: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Develop a questionaire for a survey.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop a questionaire for a survey based on panel discussion.	1.1 List questions on board students would like on survey.		1.1 Refer to Language Arts: Ecology - Grade 7, p. 4, Objective 1.
	1.2 Students will decide which questions are most important - limit 3 kinds of answers to a question.		
	1.3 Have one student copy questions on ditto and run off.	1.3 Ditto paper, paper.	
	1.4 Administer survey to class who viewed the panel discussion.		
2. Review results of administer survey.	2.1 Tabulate results of survey.		2.1 Refer to Math: Ecology - Grade 7 - p. 2, Objective 1 (a).

MATH: ECOLOGY - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT 1. Review percentages.

2. Generate story problems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Develop story problems using percentages.	1.1 Review process of finding percentages of a whole number.		
	1.2 Students will write story problems, using the environment as a theme, that require the ability to find percentages in order to solve.		
	1.3 Students will trade story problems and solve.		
	1.4 Students will review the partner they traded with the results to the problems. Also, review any problems with the wording of the problem. Students will alter problems if necessary.		
	1.5 Place story problems in notebook, titled and illustrated if desired.		

MATH: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT 1. Review finding percentages of a whole number.
2. Review degrees of a circle.
3. Develop skills in using a compass and a protractor.
4. Develop a circle graph.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. a. Demonstrate proficiency in finding percentages of a whole number. b. Calculate percentages of whole numbers.	1.1 Review finding percentages of a whole number. 1.2 Discuss when you would use this skill. 1.3 Given 5 problems, solve at least 4 correctly. Using data obtained from survey (see refer), students will calculate %'s for each question asked on survey. Arrange class into groups for this activity.	1.3 Data from Language Arts activity, Objective 1.	1.3 Refer to Language Arts: Ecology - Grade 7, p.6, Objective 1.
2. Review degrees or a circle and the vocabulary associated with circles.	2.1 Review circles: radius, diameter, degrees.	2.1 Compasses, protractors, paper, pencil.	
3. Use a compass and protractor to measure various circles.	3.1 Use the protractors and compasses to: 1) draw different size circles; 2) divide circles into several parts (equal and not equal); 3) calculate %'s of 360 (which total 100) and illustrate on a circle graph.		
4. Draw a circle graph using data obtained from a survey.	4.1 Students or groups will calculate, using %'s already derived from survey, %'s that will represent results of survey on a circle graph. 4.2 Will display results of survey by writing the question at bottom of paper with the number of responses of each response; e.g., yes, no, undecided. 4.3 Students will then draw circle graph depicting %'s. 4.4 Display results on bulletin board.	4.2 Compasses, protractors, paper, pencil.	

SCIENCE: ECOLOGY - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT
1. Provide the experience for students to observe and record observations.
2. Develop the concept of a balance in nature.
3. Compare and contrast two different ecosystems.
4. Illustrate elements of an ecosystem.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will record observations made during study of environment.	1.1 Plan a field trip to two areas that represent two different ecosystems.		
	1.2 Brainstorm with class the elements in an ecosystem they should look for and observe. Record ideas in a notebook.	1.2 Science notebooks.	
	1.3 As a class, develop a uniform, written format they will use to record their observations (descriptions, drawings, etc.).		
	1.4 Divide the class into small groups. Visit both areas assigning a specific part of the ecosystem to each group for observation.	1.4 Science notebooks, pencils.	
	1.5 Students will observe all aspects of the environment assigned and record their observations (landforms, organisms, plants and their interactions).		
	1.6 Following field trip, students will identify and record the elements of the ecosystem they observed using reference materials.	1.6 Books/plants, flowers, rocks, animals. (Craigheads - GUIDE TO WILDFLOWERS).	
2. Discuss the idea of a balance in nature.	2.1 Discuss as a class, the idea of a balance in nature, and any observations they made that demonstrated a balance in nature.		

SCIENCE: ECOLOGY - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT 1. Provide the experience for students to observe and record observations.
2. Develop the concept of a balance in nature.
3. Compare and contrast two different ecosystems.
4. Illustrate elements of an ecosystem (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
3. Compare and contrast two different ecosystems.	3.1 In small groups, have students discuss their observations, comparing their observations. Students will compare and contrast the two ecosystems.		
4. Construct a diagram.	4.1 Students will construct a diagram of one of the ecosystems observed. Should include identification of organisms, and relationships among organisms.	4.1 Large paper, markers.	
	4.2 Construct a diagram of the food web observed in an ecosystem.	4.2 Large paper, markers.	

SCIENCE: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Assist students in making predictions.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Make predictions based on information from specific sources.	1.1 Divide class into small groups to discuss the impact that development will have on the "ideal" environment, using environmental impact statements and information derived from panel discussion.	1.1 Impact statements previously written.	1.1 Refer to Language Arts: Ecology - Grade 7, p.3, Objective 1.
	1.2 As a group, they will predict what could happen if development is allowed.		
	1.3 Bring groups together as a whole and discuss each groups predictions.		

ASSIGN. SCOPE OF LESSON STATEMENT 1. Develop students' awareness of how man changes his environment.
2. Develop ways of maintaining a balance in nature.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Discover and analyze the changes man brings on his environment.	1.1 Using reference materials, resource people and observations, students will discover and discuss man's impact on the environment.	1.1 Ecology & environmental magazines, newspaper articles, encyclopedias.	
	1.2 Divide chalkboard into 3 spaces labeled past, present and future.	1.2 Chalkboard space, chalk.	
	1.3 List ways man has changed, is changing and could change the environment in the future.		
	1.4 Analyze the positive and negative effects by discussing as a class.		
2. Develop ways to maintain a balance in nature.	2.1 Have students write one way man can maintain or bring about a balance in the environment on a piece of construction paper. Students will illustrate suggestion.	2.1 White construction paper, crayons, markers.	
	2.2 Bind together to make an ecology handbook.		

SOCIAL STUDIES: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT 1. Use maps to analyze development & its effect on the environment.
2. Evaluate pros & cons relating to development & the environment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Analyze the impact development of an area.	1.1 Have students study maps, past and present, of Bozeman. Encourage them to notice the growth, direction of growth, kinds of growth. 1.2 Discuss as a group their observations and list on the board. 1.3 Develop a map of Bozeman, consisting of present development, and projected development based on observation of growth to present.	1.1 Maps of Bozeman, past and present, photographs.	
2. Evaluate impact of development on existing environment.	2.1 Discuss with class a proposed development in the Bozeman area. Read orally, newspaper articles concerning the issue. 2.2 Divide class into 2 groups, pro and anti development. Students will have impromptu debate on the issue. 2.3 Discuss debate.	2.1 Newspaper article on convention center (BOZEMAN CHRONICLE, Sept., "Letters to the Editor."	

ART: ECOLOGY - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Provide an opportunity for creative expression using ecology as a theme.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create a political cartoon on an environmental issue.	1.1 Have students examine political cartoons from newspaper.	1.1 Political cartoons from newspaper.	
	1.2 Have students draw a political cartoon on an environmental issue.	1.2 White construction paper, newsprint, pencil.	
2. Design a postage stamp with ecology as a theme.	2.1 Have students bring from home a variety of postage stamps.	2.1 Stamps brought from home.	
	2.2 Have students examine several stamps.		
	2.3 Have students draw rough draft of a stamp with ecology as a theme.	2.3 Scratch paper, ditto paper.	
	2.4 Draw final draft and paint with tempera paints.	2.4 White construction paper, tempera paints, paint brushes, water, newspaper.	
3. Design a poster using a local ecology issue as a topic.	3.1 Have students decide on a topic.		
	3.2 Have students draw several rough drafts, choosing best for poster.	3.2 Scratch paper.	
	3.3 Transfer rough draft onto posterboard.	3.3 Posterboard.	
	3.4 Color poster with magic markers.	3.4 Magic markers.	
4. Make a collage, contrasting a balance in nature and man's impact.	4.1 Examine magazines for pictures depicting nature and man's impact. Cut them out.	4.1 Magazines: MONTANA OUTDOOR; TIME; LIFE, FISHERMEN, etc., scissors.	
	4.2 Arrange on posterboard displaying a contrast of two.	4.2 Posterboard, glue.	

ART: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Create an illustration for Haiku, using watercolor.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Illustrate haiku written about nature.	1.1 Transfer haiku on white construction paper, using black felt tip pen.	1.1 White construction paper, 12"x18", cut in half lengthwise.	
	1.2 On scrap paper students will practice using the heel (thick part of brush), and toe (tip of brush), in order to create a picture for haiku.	1.2 Water colors, brush scrap paper.	
	1.3 Paint picture on construction paper using above method.		

ART: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Give opportunity to illustrate creative story.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Illustrate creative writing.	1.1 Divide story into pages for a book. Write story onto pages.	1.1 9"x11" white construction paper, black felt tip pens.	1.1 Refer to Language Arts: Ecology - Grade 7, p. 2, Objective 2.
	1.2 Illustrate story using crayon as a medium.	1.2 Assorted crayons.	
	1.3 Place illustrations in book form.		

MUSIC: ECOLOGY - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Provide an opportunity for creative expression through music.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify statements made on an ecology issue in music.	1.1 Have students listen to a variety of music that contains a message concerning man and his environment.	1.1 Records, tapes, record player, tape player.	
2. Create lyrics, or lyrics and a melody, with ecology as a theme.	2.1 Have students write lyrics to a familiar melody.	2.1 Paper, pencil.	
	2.2 Have students write lyrics and create own melody for lyrics.	2.2 Paper, pencil.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Recreation - Grade 7

READING: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of the many kinds of recreational activities in the Gallatin area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Understands use of periodicals and brochures to find information.	1.1 Read current brochures on recreation.	1.1 Brochures, Chamber of Commerce in Bozeman.	1.1 See: Language Arts: Recreation, p. 1
	1.2 Read travel magazines: MONTANA, A GUEST GUIDE TO MONTANA.	1.2 Magazines from Chamber of in Bozeman or State Dept. of Tourism.	
	1.3 Examine ads and articles concerning recreation from local newspapers: a) THE BOZEMAN DAILY CHRONICLE, b) THE LONE PEAK LOOKOUT.	1.3 THE BOZEMAN DAILY CHRONICLE and THE LONE PEAK LOOKOUT.	
	1.4 Given an ad, can extract pertinant information.		

LANGUAGE ARTS: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend the economic effects of recreation on Gallatin County.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Composes business letters.	1.1 Write letters to Chamber of Commerce and Montana State Commerce Dept. for brochures and travel magazines.	1.1 Writing paper, pens, envelopes, stamps.	
2. Brainstorm and generate lists of ideas associated with attributes of recreation.	2.1 Compile a list of all the forms of recreation in the area that generate income. 2.2 Compile a list of occupational opportunities in a resort (Big Sky, Bridger, etc.).	2.1 Paper, pencils.	2.1 Neat penmanship should be stressed and required.
3. Generates sound questions that address specific recreational issues.	3.1 Prepare questions for interview of a resort's prominent citizens.	3.1 Bring in a resource person from a resort.	3.1 Punctuation should be stressed in this exercise.

LANGUAGE ARTS: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Analyze the positive and negative aspects of recreation on the Gallatin area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Demonstrate clear and audible speech; organize thoughts and ideas.	1.1 Interview various prominent citizens of a resort regarding pro's and con's of tourism in the area.	1.1 Big Sky Resort Assn., Forest Service, Fish & Game, Ski Bridger Bowl, Bureau of Land Management, Soil Conservation Service.	
2. Organize thoughts and ideas and record them in writing.	2.1 Prepare debate on the pro's and con's of tourism.	2.1 All the above, plus notecards and pencils.	
3. Demonstrate persuasive speaking.	3.1 Deliver a debate on the pro's and con's of tourism.		3.1 Line up judges.

LANGUAGE ARTS: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the importance of advertising in recreation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Communicate in complete sentences, with appropriate word usage and grammar.	1.1 Write advertisement for "model resort."	1.1 Paper, pencils.	1.1 See: Reading: Recreation, p.1 Social Studies: Recreation, p. 2
	1.2 Deliver advertisement orally for model resort.	1.2 Tape recorder and/or video camera.	
2. Demonstrate good spacing and legibility in penmanship.	2.1 Design brochures for "model resort."	2.1 Paper, colored pens, scissors, glue.	
3. Is aware of the psychology of colors and effects, packaging and moods.	3.1 Conduct a discussion of color and the moods associated with color.	3.1 Paper, colored pens, scissors, glue.	
	3.2 Color patterns are selected and used to complete advertising brochure.		

MATH: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Comprehend the economic effects of recreation on Gallatin County.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Organize data into graph; format.	1.1 Review meaning of percents and how to calculate them.	1.1 Big Sky Resort Assn., Ski Bridger Bowl, Mont. State Commerce Dept.	
	1.2 Review circles and degrees so that percents of 360 can be obtained.		
	1.3 Conduct lesson on using protractor. Students will label angles with correct degree reading.		
	1.4 Prepare circle graphs showing the percents of income generated by tourism over a certain number of years.		
2. Solve word problems for (+) and (x).	2.1 Predict income for "model resort."	2.1 Paper, pencils, Big Sky Resort Assn., Ski Bridger Bowl, and Mont. State Commerce Dept.	2.1 See: Social Studies - Recreation, p.2.
3. Solve word problems for (-) and (÷).	3.1 Predict expenses for "model resort."	3.1 Paper, pencils, Big Sky Resort Assn., Ski Bridger Bowl, and Mont. State Commerce Dept.	3.1 See: Social Studies: Recreation, p. 2.
4. Generate realistic word problems for operating a resort.	4.1 Provide parameters for problems and assign students to generate problems.		
	4.2 Share problems with other students and refine.		
	4.3 Permanently record problems on cards for whole class to solve.		

MATH: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Comprehend the economic effects of recreation on Gallatin County.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
2. Solve word problems for (+) and (x).	2.1 Predict income for "model resort."	2.1 Paper and pencils. Big Sky Resort Assn, Ski Bridger Bowl, and Montana State Commerce Department.	2.1 See Social Studies: Recreation - Grade 7, p. 2.
3. Solve word problems for (-) and (÷).	3.1 Predict expenses for "model resort."	3.1 Paper and pencils. Big Sky Resort Assn., Ski Bridger Bowl, and Montana State Commerce Department.	3.1 See Social Studies: Recreation - p. 2.
4. Generate realistic word problems for operating a resort.	4.1 Provide parameters for problems and assign students to generate problems. 4.2 Share problems with other students and refine. 4.3 Permanently record problems on cards for whole class to solve.		

MATH: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the location and establishment of settlements (within a defined area) in response to community needs.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Apply the concepts of linear, angular, area and volume measures.	1.1 Construct floor plans to scale for "model resort", (restaurants, condominiums, hotels, shops, etc.).	1.1 Graph paper, pencils, rulers, compass, protractor, triangles, T-squares, drafting board.	
	1.2 Label floor plan; measures to scale with angles given.		
	1.3 Compute floor area and internal volume of structure.		

SCIENCE: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Recognize responsibility, as citizens, to preserve and maintain a natural balance in the environment.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Investigate the interrelationship between man-made and natural environments by studying environmental impact statement.	1.1 Review environmental impact study on recreational land use for use for "model resort." 1.2 Discuss findings in a group setting.	1.1 Environmental impact study of Ski Yellowstone, from Bureau of Land Management or Forest Service.	

SOCIAL STUDIES: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Understand the cost requirements for participation in recreation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. List] and discusses interaction between consumers and producers of goods and services.	1.1 Contact producers of goods and services to do a price comparison of different kinds of recreation.	1.1 Phone book with yellow pages, paper, pencils, telephone.	
2. Organize thoughts and ideas for participation in classroom discussion.	2.1 Prepare notes on recreation and costs to participants. Use notes for class discussion. 2.2 Discuss how recreation discriminates due to economics.		

SOCIAL STUDIES: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the location and establishment of settlements in response to community needs (social focus).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Recognize community areas and their purposes.	1.1 Design a "model resort" based on: a) research of the Big Sky or Bridger resorts; b) a study of the pro's and con's of resort development.	1.1 Graph paper, pencils, rulers, compass, protractor, triangles, T-square, drafting board.	1.1 See Language Arts: Recreation - Grade 7, pp. 2-3.

SOCIAL STUDIES: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation for recreation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Can state in a one page paper, the feelings associated with a specific recreational event.	1.1 Write a one page paper on a normal day's events and how it makes you feel. 1.2 After skiing or another recreational event, write a one page paper on how you feel. 1.3 Discuss in whole group setting the comparisons between feelilngs and what it means.	1.1 An identified recreational event or more than one.	

ART: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the location and establishment of settlements in response to community needs.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Build 3-dimensional models.	1.1 Build an architectural representation of their "model resort" using scale (See Social Studies).	1.1 Plywood, cardboard, paper mache, clay, colored paper, spools, cartons and other "odds and ends."	1.1 See Social Studies: Recreation - Grade 7, p.2.

ART: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the importance of advertising in recreation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Design and execute an art creation.	1.1 Design for "model resort": a) tee shirts; b) posters; c) curios. 1.2 Execute designs.	1.1 Tee shirts, fabric crayons, paper, colored pens, clothes pins, felt, clay, pine cones, other "odds & ends" for curios.	1.1 See Social Studies: Recreation.

MUSIC: RECREATION - GRADE 7
ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the importance of music in advertising for recreation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Aware of personal choices in musical enjoyment.	1.1 Write promotional song for "model resort." 1.2 Record promotional song on tape. 1.3 Have students individually vote for best ad. 1.4 Record results on chart. 1.5 Discuss differences in taste.	1.1 Tape recorder and/or video camera.	1.1 See Social Studies: Recreation - Grade 7, p. 2.

HEALTH AND PHYSICAL EDUCATION: RECREATION - GRADE 7

ASSIGN. SCOPE OF LESSON STATEMENT Appreciate the importance of recreational activities as a means of physical fitness.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Aware of physical fitness benefits and problems.	1.1 Study the benefits and kinds of conditioning; sports medicine.	1.1 Books from Bozeman Public Library, Films from Dist. #7.	
2. Demonstrate physical fitness by participating in recreational/physical event.	2.1 Participate in general conditioning for different kinds of recreation, aerobics & stretching, etc.		
	2.2 Downhill or cross-country ski at Big Sky or Bridger Bowl.	2.2 Ski equipment: boots, skis, and poles.	2.2 Make necessary transportation arrangements.
	2.3 Discuss safety rules for a safe skiing experience.		

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Geography - Grade 8

READING: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of geographical formations through an appreciation of ancient myths.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Orally present one explanation for a geographical formation as explained in the myth she/he read.	1.1 Select various myths that explain geographical formations. Use library books, reading textbooks, etc. Discuss types of formations.	1.1 Chalkboard, chalk. Library books of myths, example: Ginn 720 Level 12 PHAETHON, THOR'S UNLUCKY JOURNEY, THE STORY OF PERSEUS.	1.1 Elicit from students: Mountain ranges (or 1 specific mountain as an example), river valleys, canyons, etc. 10 minutes.
	1.2 Students read myths and prepare brief summary explanations for oral presentation.	1.2 Books above.	1.2 30+ minutes
	1.3 Students present short oral reports.		1.3 Approximately 3 minutes/student.

READING: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of weather patterns and landforms of the Gallatin area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Read weather records and create a weather map from calculated averages of a month period in history.	1.1 Select numerous books with weather records. Peruse and discuss types of weather to study. Make experience chart.	1.1 Library books on the topic. MONTANA WEATHER, Cunningham, Carolyn, 551.5, C91m, MONTANA IN MAPS, Taylor, Robert L. R, 912.786, T21m, Bozeman Sr. High Library. Daily newspapers, get xeroxed copies of weather reports. Chalkboard, chalk.	1.1 Elicit from students: Types of weather to map, precipitation, (big blizzards), temperature highs & lows, tornadoes, northern lights (aurora borealis) etc., 15 min.
	1.2 Students select a type of weather from the experience chart to research, average, and map.	1.2 Experience chart.	
	1.3 Students, read about their weather type, calculate averages and transfer information to their own maps of the area.	1.3 Library books, daily newspaper, white paper, pencils, rulers, colored pencils, crayons or markers.	1.3 30+ minutes.
2. Read about the various landforms in the Gallatin area. Recognize, label, and describe each landform.	2.1 Make experience chart of Gallatin landforms.	2.1 Chalkboard, chalk.	2.1 Elicit from students: mountains, foothills, canyons, plains, river valleys, etc. 5-10 minutes.
	2.2 Students locate information in books about each landform and compile a list of descriptions.	2.2 Library books, geography textbook (FOLLETT WORLD GEOGRAPHY, etc.), MONTANA MOUNTAIN RANGES, 917.86, M76, Helena, MONTANA MAGAZINE, 1981.	2.2 20-30 minutes.
	2.3 Students draw and label examples of each landform.	2.3 Paper, pencils.	2.3 15 minutes.

LANGUAGE ARTS: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Apply knowledge of newspaper formats to writing about geographical disasters.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review format for a news article.	1.1 As an introduction, discuss geographical disasters and how they are reported in newspapers.	1.1 Large butcher paper, marking pens.	1.1 Elicit from students: earthquake, flood, volcanic eruption, mud slide, avalance, rock slide, ice dam, flash flood, etc., 5-10 minutes.
	1.2 Teach parts of a news article: headline, byline, cutline. 5 W's (who, what, where, when, why and sometimes how). Main idea almost always stated in 1st sentence.	1.2 Chalkboard, chalk or transparency & overhead projector. One newspaper copy for every 2 or 3 children. Pencils, paper, glue.	1.2 30 minutes.
	1.3 Examine newspapers, and cut out and label each part of a news article.		
2. Listen to tape.	2.1 Listen to tape about the West Yellowstone Earthquake of 1959.	2.1 Tape - BERNIDINE JOHNSON, 978.6, GA-58, W. Yellowstone Earthquake, 1959, Bozeman High School Library.	2.1 Length of tape.
3. Write news article.	3.1 Choose disaster from 1.1 Experience Chart research if necessary.	3.1 Library books about different disasters: Mt. St. Helens; THE BIG BLAST, Forest Service Avalanche Book; Newspapers - BOZEMAN CHRONICLE, December 1984, "Ice Dam in Three Forks."	3.1 15-45 minutes.
	3.2 Write fictious news article. 3.3 Field trip to Quake Lake would be a great culminating activity if possible. Go up river from Ennis approx. 10-15 miles. Visitor Center is well marked on the left.		

LANGUAGE ARTS: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Use knowledge of adjectives to describe geographical formations.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write a detailed description of a local geographical formation without naming it.	1.1 Make experience chart review of geographical formations.	1.1 Chalk, chalkboard or butcher paper, pens.	1.1 Elicit geographical formations: 5 minutes.
	1.2 Review together how to use a Thesaurus.	1.2 Several copies of Thesauruses.	1.2 5 minutes.
	1.3 Choose a formation from the experience chart. Write a detailed description without naming it.	1.3 Experience chart from 1.1, paper, pencil.	1.3 10-15 minutes.
	1.4 Exchange papers with partner and try to guess formation or teacher collects, reads orally, and students discuss and guess formations or post on bulletin board and students draw pictures of their guesses and pin them next to the written assignment.	1.4 Possibly drawing paper, crayons, etc.	1.4 5-30 minutes.

LANGUAGE ARTS: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate knowledge of various story types in writing about geographical features.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review fiction story types: myth, legend, talltale, and fantasy poem.	1.1 Read examples of each or remind students of these story types in their reading series.	1.1 Ginn Reading Series 720, Level 12, Unit 2-3, (all types represented). Also: Shel Silverstein poetry, WHERE THE SIDEWALK ENDS; A LIGHT IN THE ATTIC, etc.	1.1 Teach this lesson with: Reading: Geography - Grade 8 p. 1. 10-20 minutes.
	1.2 Discuss important features of each. Make experience chart.	1.2 Chalkboard, chalk or transparency and overhead projector.	1.2 MYTH: Traditional story of historical events not obviously true. Used to explain world view of people, explain a practice, belief, or natural phenomenon. LEGEND: Explanation of how things came to be. Not verifiable. A popular "myth" of recent origin. TALL TALE: Folktale of exaggeration about people or events. Often humorous with quick action. FANTASY POEMS: Make believe. Sometimes humorous although not necessary. Sometimes have rhyming scheme although not necessary. 10-20 minutes.
2. Write myth, legend, talltail, or fantasy poem.	2.1 Choose story type and write a fantasy about a local geographic formation.	2.1 Theme paper, pencils.	2.1 15-30 minutes.
	2.2 Share with partners, orally, bulletin board, or compile a booklet for class library.		2.2 5 + minutes.

LANGUAGE ARTS: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Understand the four main types of letters and demonstrate knowledge through writing about geographical features.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review four main types of letters, (business, friendly, invitation, thank you).	1.1 Review 4 types of letters and components of each using information from experience chart.	1.1 English textbooks or writing manual, chalkboard, chalk or overhead, chart.	1.1 BUSINESS: 10-20 minutes heading; inside address; greeting; body; closing; signature. FRIENDLY & THANK YOU: heading; greeting; body; closing; signature INVITATION: include important information: who heading; what greeting; where body; when closing; signature

LANGUAGE ARTS: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Understand the four main types of letters and demonstrate knowledge through writing about geographical features (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
	1.2 Discuss what you could write about to relate to geography. Record on experience chart.	1.2 Chalkboard, chalk, chart.	1.2 Examples: Request information from: Soil Conservation Service; Forest Service; BLM, etc - 10 minutes. Write to someone explaining an interesting local phenomenon. Write a thank you to someone who helped you experience something outdoors. Invite someone to go check out a geographic formation with you. Request a ficticious character to (goddess, god, etc.) speed up a geographic/ geologic event.
2. Write a letter.	2.1 Write letters when possible and encourage actual letters to be mailed. Replys will be added reinforcement.	2.1 Theme paper or stationary/ pens/envelopes or envelope patterns so students can make their own.	2.1 15-20 minutes.
	2.2 Exchange/proofread, and make corrections.		

MATH: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT 1. Create timelines of geographic events.
2. Understand time elements for the changing of geographic formations.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. List elements that could be included in a geographic timeline.	1.1 Use social studies textbook to review timelines. Notice intervals of years.	1.1 Social studies textbooks or other examples of timelines.	1.1 10 minutes.
	1.2 Review geologic time. Use resource charts and maps. Identify Gallatin area on map and discuss geology of the area.	1.2 Resource chart and maps, (other examples of geologic time).	1.2 15-20 minutes.
	1.3 Discuss geographic events that could be included on a timeline for local events. Experience chart. Read article of "Gallatin County's Heritage," pp. 1-2.	1.3 Overhead or butcher paper, and pens.	1.3 10-15 minutes. Use chart from Resources. Pre-Cambrian Era is oldest rock. Laid down 1st. Each named section is a layer of rock, or discuss the lengthy time element involved in river valleys being formed, river courses changing, erosion and uplifting mountain ranges to be buttes, bluffs, foothills to be formed, etc. Students could make estimates of time involved and make a timeline of these events. Students should understand that geology/geography is a continuous process.

MATH: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate knowledge of measurement, weight, distance, area, volume, etc., in writing story problems.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review measurement formulas.	1.1 Review concepts and formulas for each, using the information on the experience chart.	1.1 Optional math textbooks, chalkboard, chalk.	1.1 Review: perimeter of polygons, circumference of a circle, area of: circle, triangle, parallelograms, trapezoids, volume of right prism, cubes, cylinders, cones. 10-30 minutes.
	1.2 Discuss various topics to use to to write problems relating to geography, using the experience chart.		1.2 Area of Forest Service land; volume of river; volume of a mountain; area of the surface of a lake; volume of a lake; volume of land that slid in Quake Lake mudslide; Perimeter of Bozeman City limits, etc., 5-10 minutes.
2. Write and solve 10 story problems using measurement skills.	2.1 Write students and solve at least 10 story problems.	2.1 Paper, pencils.	2.1 30-45 minutes.
	2.2 Switch problems with a partner.		
	2.3 Solve, switch, correct.		

MATH: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Create an understanding of the barter system.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Make a chart or schedule of trade items and values.	1.1 Discuss barter system and items used in trade.	1.1 Experience chart.	1.1 Gold, tobacco, furs, pelts, ammunition, fabric, beads, wool blankets, cookware, etc., 10-20 minutes.
	1.2 Discuss worth of minerals.		1.2 5-10 minutes.
	1.3 Students make a chart of trade items and their worth - estimating values.		1.3 15 + minutes.
	1.4 Exchange charts and discuss differences. Students should understand that barter system does not have a set criteria. Some people value certain items more than others, thus disagreements in trading were common.		1.4 10 minutes Also see: Math: Early Explorers - Grade 4. Math Native Americans - Grade 8.

MATH: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT 1. Appreciate various animal species in geographical regions.
2. Compute percentages.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Observe animal life in differing geographic regions, keep record of observations, and compute percentages of total observed in each region.	1.1 Hand out charts and discuss each specie and each region. See experience chart. This lesson will be done primarily outside class. All observations should be timed, and the time included at the top of the chart.	1.1 Make chart for each student.	
	1.2 Give students a due date for completion of the chart. 2-3 weeks is probably plenty of time.		

Species	Conif. Forest	Alpine	Grass-land	Riparian Woodland	Wetland	Streams Rivers	Agricul. Land	Rural Urban
Birds								
Mammals								
Reptiles Amphib.								
Insects								
Total								
							Grand Total	

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
	1.3 Calculate totals.	1.3 Experience chart.	1.3 Total each region; also total each specie; figure grand total of all species observed.
	1.4 Students decide what percentages to calculate. Teacher assigns minimum number of calculations. See experience chart.		1.4 % of grand total of birds seen in all regions. % of mammals seen in wetland to wetland total. % of total animals seen in alpine region to grand total.
	1.5 Display & discuss together		

MATH: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding and skill in using ratios and proportions.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write correct proportion problem and solve.	1.1 Indian village problems. Introduce ratios and proportions in a general sense.	1.1 Indian village problems (in TRC file). Introduction: Use any text as a guide. Briefly teach ratio and proportion - what it is and how to compute it.	
	1.2 Give students Indian village handouts. Have students study the map of the village. Have them orally respond to questions that demonstrate they can locate places on the map.	1.2 Indian village handouts: a. map of village; b. problems 1-6. Rulers.	
	1.3 Have them measure between points the teacher identifies. Introduce the idea of approximate here; about 2 1/2 inches from X to Y.		
	1.4 Have students complete problems 1-5.		
2. Write story problems involving proportions.	2.1 Have students solve problem #6.	2.1 Indian village problems.	
	2.2 Have other students review problems written by classmates. Goal: To make problems coherent and they are to solve.		2.2 A class collection of problems could lead to the making of a small book or generally filed in a problem solving resource box.

SCIENCE: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Appreciate local areas of geographical interest.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Choose area of geographical interest in Gallatin area to research.	1.1 Discuss areas of interest to students.	1.1 May wish to contact geography or geology people at MSU for additional ideas and research information, (see resource list). Experience chart.	1.1 Possible areas of interest: Quake Lake, Buffalo Jump, Three Forks, Yellowstone thermal activity, etc. 10 minutes.
	1.2 Decide on area or areas to research and visit.		1.2 5-10 minutes.
	1.3 Discuss ways to research these areas.	1.3 Experience chart, library books and periodicals.	1.3 Ways to research: write letters, newspaper morgue. Also see: Language Arts: Geography - Grade 8, p. 1 Social Studies: Native Americans - Grade 8, 5-10 minutes.
	1.4 Individuals or group research.	1.4 Research material pertaining to topic chosen. See Experience Chart 1.3 and resource list.	1.4 Time element will vary.
2. Visit sight(s) of geographical interest in the Gallatin area.	2.1 Fieldtrip to various geographical sights.	2.1 Transportation.	2.1 Time element will vary.
3. Summarize information and feelings about researched area.	3.1 Follow-up discussion, critique, or written project.		

SCIENCE: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Comprehend research findings of MSU geography and/or geology students.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Listen to and summarize presentations of MSU geography and/or geology students relating information about local phenomenon.	1.1 Pre-discussion. After speaker(s) is lined up, discuss topic with students and brainstorm appropriate discussion questions about the topic.	1.1 Paper, pencils.	1.1 Teacher should contact MSU geography or geology professors. Engage professor or MSU students to speak to class about local feature(s). See resource list.
	1.2 Listen to presentation. Use discussion questions to further the interaction.		1.2 30-60 minutes, (including question/answer time).
	1.3 In writing students should summarize the information presented, items of extreme interest, evaluation of speaker and addition questions and/or concerns stimulated by the presentation.	1.3 Pencil, paper.	1.3 20-45 minutes
	1.4 Share summaries orally, on a bulletin board or read onto a cassette tape for a listening center.		1.4 Time element will vary.
	1.5 Discuss items of extreme interest, evaluation of speaker, and additional questions or concerns stimulated by the presentation.		1.5 Time element will vary.
	1.6 Optional (could be extra credit option). Follow-up on additional questions and concerns. Use research materials, write letters, etc.		1.6 Time element will vary.

SCIENCE: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Analyze various soil types from the Gallatin area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Evaluate the fertility of various soil types by growing plants in soils that are collected.	1.1 Discuss project and ways to accurately evaluate.		1.1 May wish to included review of scientific method. Hypothesis, method, observation conclusion. Ellicit from students the importance of having similar variables. Example: same containers for soils; same watering schedule; same plants; different soils. Students may wish to experiment with altering a second variable. Example: test to see if different plants would grow better than others in certain soil types. 10-25 minutes.
	1.2 Students are assigned to bring in separate bags of various soil types. Label each bag with location and description. Bring in at least three various types.	1.2 Students should save milk cartons from lunches. 3¢ each. Open, wash, poke drain holes in bottom and dry.	1.2 Description example: Location: next to river; Description: sticky, clayey, light gray. Homework: each student should have separate charts for each soil type.
	1.3 Each student puts soils in separate containers and labels each soil type with his/her name, date, location that soil was collected, and description of soil type. Plant 3 seeds in each container. Set up observation chart. See experience chart.	1.3 Newspapers, paper towels, milk cartons, labels, seeds. Additional activity here might be to have a seed specialist come speak to class. See resource list - FISHER SEED COMPANY.	1.3 Charts should include: label information, hypothesis, and columns for recording observations. Example for recording observations - column headings: Date/Time - Observation - Comments. Charts should also include a space at the end for conclusions.

SCIENCE: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Use mapping techniques to make a soil and vegetation map of the Gallatin area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review soil types and vegetation found in each.	1.1 Review project of fertility of soils.		1.1 Teach Science: Geography - Grade 8, p.3 before this lesson. 10-20 minutes.
	1.2 Discuss soil types and vegetation in the area using prepared charts, maps, and diagrams. May wish to include discussion and study of soil formation.	1.2 See resources, charts, map, and diagrams. Use area maps for students to estimate approximate locations of each vegetation environment.	1.2 Examples of vegetation/wildlife environments: alpine, coniferous forest, grassland, riparian woodland, wetland, streams/rivers, agricultural land, rural/urban land. Examples of soil types: silty, silty-clayey, clayey, saline, deep soils, limy, shallow, limy-shallow, gravely, sandy. 30 minutes.
2. Construct maps showing soil and vegetation of the Gallatin area.	2.1 Students will construct a map of area soil types and a map of area vegetation types.	2.1 Paper, pencils, colored pencils or markers.	2.1 Approximately 60 minutes.
	2.2 Share maps with presentations or bulletin board display.		2.2 Time element will vary.

SOCIAL STUDIES: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Use reference skills to study local formations.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review the various geographic formations found locally.	1.1 Review formation types.		1.1 See Experience Chart Reading: Geography - Grade 8, p. 2 5-10 minutes
	1.2 Review reference options: card catalog - books, encyclopedias, atlas, periodicals, vertical file, textbooks	1.2 Soil Conservation Service, Bozeman High School Library, Bozeman Public Library, MSU Library, Science Math & Teachers' Resource Center, MSU: 1) Geography textbooks sections 2) Geography (science) section 3) MONTANA IN MAPS, 1974, 435.26, MSU, 1974.	1.2 5-15 minutes
2. Visit a reference center and use reference skills to locate and research material pertaining to local formations.	2.1 Assign a formation (found locally) to each student. Each student is expected to visit one of the reference sections listed in resources. (Note: fieldtrips are another option).		2.1 Give several days for completion of this homework. Information to be collected about their assigned topics might include: 1) location; 2) how it was formed; 3) time involved in formation process; 4) soil types; 5) vegetation types; 6) population in that area; 7) wildlife in that area; 8) problems; 9) assets, etc.
	2.2 Students will be expected to report on their search, as well as information about the assigned formation.		

SOCIAL STUDIES: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Use reference skills to study local formations (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
3. Students will use oral presentation technique to convey information collected	3.1 Allow for oral presentations of findings.		3.1 3-5 minutes per student.
4. Students will explore personal reactions to this assignment, career options viewed, and observations of people.	4.1 A follow-up discussion might include thoughts, feelings, fears and expectations of their visits to new places; types of people viewed; career options available; etc.		4.1 15-60 minutes.

SOCIAL STUDIES: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of alternative dwelling options and appropriate application with respect to location, climate, soil type, etc.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review soil & vegetation types, topography and earth changes in Gallatin area.	1.1 Review soil types, vegetation types, topography, and earth area.		1.1 When possible, teach this lesson after: Reading: Geography - Grade 8, Language Arts: Geography - Grade 8, Science: Geography - Grade 8, 10-20 minutes.
2. Research alternative dwelling options and design a home to fit a chosen site.	2.1 Read about various dwelling options.	2.1 In advance write: National Center for Appropriate Technology (NCAT) P.O. Box 3838 Butte, MT 59701 494-4572 Library books - see resource list.	2.1 Approximately 60 minutes. Once reference materials are compiled. The search for reference materials could be included in this project.
	2.2 Possibly have a speaker present information about alternative structures.	2.2 Local architects, MSU School of Architecture, See resource list.	2.2 Time element will vary.
	2.3 Students choose a dwelling sight and design their dwelling to fit the sight and their personal needs. See experience chart.	2.3 Graph paper, pencils/colored pencils, markers, etc.	2.3 Time element will vary. Students should be encouraged to consider not only dwelling sight and structure, but also heat source, water source, sewage disposal, landscaping, division of space inside the home, lighting, etc.
	2.4 Students may wish to build models of their dwellings, including decorating, appliance purchase, etc.	2.4 Materials will vary.	2.4 Time element will vary.
	2.5 Students share designs and/or models by presenting orally, display, or exchanging with one or two other people for individual critique.		2.5 Time element will vary.

SOCIAL STUDIES: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding about population density with respect to the geography of the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Review of local geographic formations.	1.1 Review local geographic formations. Each student will sketch a map of these formations in the Gallatin area.		1.1 See: Reading: Geography - Grade 8, p. 2, Science: Geography - Grade 8, p.6, 30-60 minutes.
2. Study settlement patterns and discuss population density as it apply to the geography of an area.	2.1 Use local Montana and city maps to study population distribution. Add population criteria to maps from 1.1 2.2 Discuss maps.	2.1 See resource list, Montana Department of Highways, Atlas of Montana.	2.1 30-60 minutes. 2.2 Population in relation to: Location of rivers: transportation, water, sewage. Location of agricultural land. Location of mountains, steep canyons, flood plains. Location of MSU. Location of entertainment center.
	2.3 Notice patterns of population density with regard to geography. 2.4 Discuss other factors involved in population distribution. See experience chart.		

ART: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Create a relief map of the area.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use knowledge of local geography to create a relief map of the Gallatin area.	1.1 Review geography through the use of maps.	1.1 Maps of the area that show rivers, mountain ranges, etc.	1.1 10-20 minutes.
	1.2 Divide into groups or work as a class unit to plan the project. Draw a diagram of the plan. Make clay next session.	1.2 Send home list of materials to bring to make the clay. See experience chart for recipe.	1.2 Tell students size of map Example: Cardboard base of 4' x 4'; material will be Salt Clay Recipe 1 cup water 1 cup flour 1/2 cup salt 2 Tablespoons cooking oil 1 teaspoon cream of tartar Also needed: mixing bowl, mixing spoons, plastic wrap, paper towels, measuring cups, measuring spoons.
	1.3 Make clay and begin project. (May be small groups or entire class). Note: If project is to be continued for several days, keep extra clay wrapped in plastic and cover map with damp paper towels and plastic.		1.3 Time element will vary.
	1.4 When map is finished, it must sit in warm spot to dry for a few days (sunny windows work well!).		
	1.5 Paint with acrylic paint. Tempra will work but use sparingly so as not to soak the clay again.		
	1.6 Display! (include a typed label with title and artists' names for polished look).		

ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of active geology.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Manipulate layers of colored clay - representing rock layers to understand active geology the changing earth.	1.1 Roll each color into a separate layer 1/4" to 1/2" thick. Carefully stack layers on top of one another. Do not mash together as colors will be difficult to separate.	1.1 Rolling pins, many colored clay; or salt clay from Arts: Geography - Grade 8, p.1 with food coloring, table knives.	
	1.2 Discuss how we could represent various geographic changes. See experience chart.		1.2 Faults - uplifts: Cut with knife and slide layers. River Valleys: Cut V with a knife. Discuss erosion from a river. Folding: Bend Clay. Erosion or collapse - folded formation: Bend clay, remove various amounts etc.
	1.3 Experiment with the above. Observe. Discuss.		

MUSIC: GEOGRAPHY - GRADE 8

ASSIGN. SCOPE OF LESSON STATEMENT Create sounds of geographic activity.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Prepare a tape recording of recreations of sounds relating to geography.	1.1 Discuss some sounds to be recreated and ways to recreate them. See experience chart.		1.1 River - calm; in wind; rapids; Lake - lapping against shore; Mudslide due to earthquake; Avalanche; Icefall cracking during melt; Rock slide; Single boulder "cut loose" on steep hillside; A forest in a windstorm, etc. Voices may be used as well as objects. Time element will vary.
	1.3 Recordings should be made in private, (a closet, empty room, or hallway will work).		
	1.4 Once all sounds are recorded, the class listens to each, stops, and trys to identify the geographic activity.		

HEALTH AND PHYSICAL EDUCATION: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an understanding of various geographical disasters and predict the health hazards that might result.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Use forecasting talent to brainstorm possible health hazards which could result from various geographical disasters.	1.1 Discuss past disasters and brainstorm potential disasters relating to Gallatin geography. Record on butcher paper or chalkboard.	1.1 See Experience Chart.	1.1 Elicit from students See: Language Arts: Geography - Grade 8 p. 1 Quake Lake - earthquake, mudslide; West Yellowstone earthquake; flooding; ash fall from coast volcanic activity; drought; acid rain; ozone thinning, etc.
	1.2 Brainstorm potential health hazards resulting from above disasters. Discuss prevention, follow-up procedures, government agencies which might be involved. See experience chart.	1.2 County/State Health Dept.; County Extension Service; County Welfare Dept.; law enforcement agencies; children services, etc.	1.2 Elicit from students Injury at actual time of disaster; water contamination; air contamination; food shortages; water shortages; skin reaction; solar radiation increases, etc.

HEALTH AND PHYSICAL EDUCATION: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation of recreational opportunities in the area and their locations.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Compile a list of recreational opportunities in the area and their locations.	1.1 Define recreation together. What it means to each student.		
	1.2 Begin by thinking of unique geographical formations and the recreational opportunities they provide.		
	1.3 Brainstorm and list all activities students can think of. Include Include locations whenever possible.	1.3 Butcher paper, big marking pen (later transfer to ditto so each student has a copy).	
	1.4 Assign each student to bring a list in the next day of all recreational activities and locations of family favorites.		
	1.5 Compile new list together and discuss. Add all others that come to mind.		
	1.6 Give each student a copy of the list. Discuss its value. See experience chart.		1.6 Elicit from students The value of such a list; options available when students "have nothing to do" or are "bored"; alternatives to driving, drinking, drugs; activities to involve guests from another area of the state, country or world; opportunities to try something new.

HEALTH AND PHYSICAL EDUCATION: GEOGRAPHY - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Demonstrate knowledge of a specific recreational activity through oral presentation.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Prepare and present a demonstration speech to teach others about a specific recreational activity.	1.1 Brainstorm list of recreation favorites that students enjoy. Discuss how one might teach a friend the same skill. See experience chart. Read old news articles about recreation.	1.1 See resource list.	1.1 Examples: alpine skiing; telemark skiing; cross-country touring; bowling; swimming; horseback riding; roping; throwing horseshoes; kayaking; canoeing; rafting; fly fishing; spin fishing, etc
	1.2 Teach, or review components of demonstration speeches. See experience chart.	1.2 Speech communications, textbook.	1.2 I. Purpose of speech; II. Explanation of equipment needed; III. how to; IV. locations; V. appropriate for what age levels VI. question and answer time. Students need to hand in written outline before presentation. *minimum - 7 minutes *maximum -20 minutes (or whatever seems appropriate to the group. * does not include question and answer time.
	1.3 Presentations.		

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Native Americans - Grade 8

READING: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT 1. Generate interest in Native Americans and their lifestyles.
2. Familiarize students in Native American lifestyles, tribes, customs.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will express interest in Native American unit by reading or listening to selections, discussing or questioning presentations.	1.1 Select books from library and display in room before orally reading to the reading to the class and/or assigning sections.	1.1 Library books; encyclopedias; audio visuals - (Bozeman Film Library); books; pamphlets & cassettes (Teachers' Resource Center) Examples of books: BIRD WOMAN, James Willard Schultz. Boston, Houghton Mifflin, 1918. (Gallatin Gateway Library-easy reading). WINGED MOCCASINS, Frances Joyce Farnsworth. New York, Julian Messner, 1954. (Gallatin Gateway Library). SACAJAWEA: GUIDE TO LEWIS & CLARK, Jerry Seibert. Boston, Houghton Mifflin, 1960. (Gallatin Gateway Library-easy reading). SACAJAWEA, Betty Westrom Skold. Minneapolis, Dillon Press, 1977. (Bozeman Public Library-short easy reading). SACAJAWEA, Anna Lee Waldo. New York, Avon Books, 1978. (Bozeman Public Library, Bozeman Senior High-adult book). THE AMERICAN INDIAN CRAFT BOOK, Marz & Nono Minor. Lincoln, University of Nebraska Press, 1972. (Bozeman Public Library).	1.1 Develop lesson on Sacajawea if interest exists.
	1.2 Select various examples and read orally to class and/or assign reading. Present films. Discuss.		

READING: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT 1. Generate interest in Native Americans and their lifestyles.
2. Familiarize students in Native American lifestyles, tribes, customs (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
		MONTANA OUR LAND & PEOPLE, William L. Lang & Rex C. Myers. Boulder, Pruett, 1979. (Gallatin Gateway Classroom set - Native Americans in Montana). Pamphlet: STONE CIRCLES IN THE MONTANA ROCKIES, Davis, Aaberg, Wilson, Ottersburg. Department of Sociology, MSU, 1982. (See Native Americans folder in Teachers' Resource Center).	

READING: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT 1. Create an understanding of Lewis & Clark's exploration in our history.
2. Develop the concept of sequence.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will recognize the purpose of Lewis & Clarks' mission and importance of their discoveries.	1.1 Review and discuss period of history of Louisiana Purchase and its exploration.	1.1 U.S. history texts.	
2. Will trace Lewis & Clarks' journey on a U.S. map.	2.1 Have students trace Lewis & Clarks' journey, naming locations and physical landmarks. Stress Gallation region.	2.1 Map of Lewis & Clarks' journey, blank U.S. & Montana maps.	2.1 Post large U.S. map & Montana map.
3. Will interpret excerpts of Lewis and Clarks' journal and sequence them correctly.	3.1 Have students read and discuss excerpts in groups, and sequence them according to Objective 1.	3.1 Excerpts from Lewis and Clarks' (emphasize time & locations). See also, "Headwaters Herald," newsletter published by Dept. of Fish, Wildlife & Parks. Includes excerpts from Journals at Headwaters (Native Americans Folder Teachers' Resource Center).	3.1 See condensed version of journals of Lewis and Clark.

Assign. SCOPE OF LESSON STATEMENT Review outlining, summarizing, classifying and note taking, by researching Native American tribes.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will demonstrate outlining, summarizing classifying and note taking skills in preparing a research report on Indian tribes.	1.1 Prepare students by reviewing skills. Work together on each step of outlining, summarizing, classifying, and note taking as needed.	1.1 Library books, encyclopedias. Teachers' Resource Center, MSU. See resource list.	1.1 See Reading: Native Americans, p.1. Prepare outline form.
	1.2 Discuss format of final paper.		
	1.3 Provide research and writing time in class with teacher assistance as needed.		

READING: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Emphasize the understanding of Gallatin Valley Native American cultures by reading about local tribes, artifacts, dwelling sites.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will name Native American tribes of the Gallatin Valley and describe elements of their cultures. Will recognize evidence of these cultures that still remains today.	1.1 Have students read to discover what tribes lived in Gallatin Valley, how they lived, and what evidence of their culture still remains today. Discuss results of reading in class.	1.1 See Resource list: Missouri Headwaters State Park Madison Buffalo Jump State Monument Museum of the Rockies "Headwaters Herald", newspaper published by Dept. of Fish, Wildlife & Parks, also available at Chamber of of Commerce (Native Americans folder - Teachers' Resource Center, MSU). Maps. (See Native American folder, Teachers' Resource Center). Headwaters; Madison Buffalo Jump; Gallatin Valley. Books: MONTANA, OUR LAND AND PEOPLE, William L. Lang & Rex C. Myers. Boulder, Pruett Pub., 1979. (Gallatin Gateway School-classroom set) JOURNALS OF LEWIS AND CLARK, See: Reading: Native Americans, p. 1. Native American Folder: Teachers' Resource Center, BOZEMAN DAILY CHRONICLE Centennial Edition, Sunday, March 27, 1983, (clipping).	

LANGUAGE ARTS: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Provide an experience in organizing a museum exhibit of Native American artifacts and articles.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will collect artifacts, pictures, and drawings for a museum exhibit.	1.1 Have students bring authentic artifacts, cut pictures, make drawings, and/or make simulated artifacts of Native American cultures. Prepare display.	1.1 Families' and friends' collections. See Resource List: Arrowhead Collection - Ray Bergstrom. National Geographics or old magazines and books to cut pictures.	1.1 See Art: Native Americans, pp. 1-2. Science: Native Americans, p. 1.
2. Will compose fact cards to display with articles.	2.1 Have students write fact cards about articles describing object, possibly when and how it was used, and where the article was found. (If articles are made, imaginary facts can be recorded). 2.2 Invite other classes and/or parents to view display.		

LANGUAGE ARTS: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Develop the concept of journal writing and provide a creative writing experience.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will explain the characteristics of a journal.	1.1 Read excepts from journal.	1.1 Lewis & Clarks' journal.	
	1.2 Discuss characteristics and purposes of journal writing: dates, places, etc.		
2.1 Will compose a journal entry that describes a possible day of the Lewis & Clark Expedition.	2.1 Have students write a journal entry from the point of view of a member of Lewis & Clarks' party.		2.1 Have students copy their entries in a simulated journal.

LANGUAGE ARTS: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Develop the concepts of comparison and contrast through the study of two or more Native American tribes.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will describe the meanings of "compare" vs. "contrast".	1.1 Review and discuss meanings and application of the concepts of compare and contrast. 1.2 Practice likeness & differences.	1.1 Practice worksheets with comparing and contrasting. Ex. Ginn 720 Level 12.	1.1 Record: (List definitions and examples of compare-contrast as given by students).
2. Will distinguish characteristics of two or more Native American tribes according to likenesses & differences.	2.1 Have students study research materials about specific tribes.	2.1 See Reading: Native Americans.	
	2.2 Have students choose two or more tribes about which to compare and contrast characteristics in a written and/or oral report.		2.2 Display written reports. Tape oral reports.

Assign. SCOPE OF LESSON STATEMENT Review the concept of letter writing by creating communication between members of Lewis & Clark's expedition party and Native Americans.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will write letters from the point of view of a Lewis & Clark expedition member to a Native American encountered on the trip, and vice-versa.	1.1 Ask class to imagine each is a member of Lewis & Clarks' expedition party. Instruct them to write a letter to a Native American encountered on their trip. The letter should contain news about the trip as well as questions for the recipient. 1.2 Redistribute the letters to the class and have the students write responses.	1.1 See: Reading: Native Americans, pp. 1-2. Social Studies: Native Americans, p. 1.	

MATH: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Create ideas for problem solving involving the Native American theme.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will recall mathematic operations and concepts.	1.1 Discuss operations, key terms, and formulas. Encourage students to brainstorm creative applications to Native American life. Examples: Addition; subtraction; multiplication; division; estimates; decimals, measurement; geometry; length; area; volume; integers; fractions; graphing; proportions; percent	1.1 8th grade math text, blackboard, chalk, or chart,	1.1 Record formulas as ideas are formulated. Examples: $rt = d$ Rate x Time = Distance $A = bh$ Areas = Base x Height (parallelogram) $A = h\left(\frac{a+b}{2}\right)$ Trapezoid $A = 1/2\ bh$ Triangle $C = \pi d = 2\pi r$ $A = \pi r^2$ Area of circle tipi $V = 1/3\pi r^2 h$ Volume of Cone $A = \pi r^2 + \pi rs$ Surface Area of Cone.
2. Will design verbal and written problems about Native Americans.	2.1 Have students compose problems using the varied ideas of Objective 1.		2.1 Copy and compile students' problems according to subject areas into a booklet for redistribution and review.

MATH: NATIVE AMERICANS - GRADE 8
ASSIGN. SCOPE OF LESSON STATEMENT Develop understanding and skill in using ratios and proportions.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Write correct proportion problem and solve.	1.1 Indian village problems. Introduce ratios and proportions in a general sense.	1.1 Indian village problems (in TRC file). Introduction: Use any text as a guide. Briefly teach ratio and proportion - what it is and how to compute it.	
	1.2 Give students Indian village handouts. Have students study the map of the village. Have them orally respond to questions that demonstrate they can locate places on the map.	1.2 Indian village handouts: a. map of village; b. problems 1-6. Rulers.	
	1.3 Have them measure between points the teacher identifies. Introduce the idea of approximate here; about 2 1/2 inches from X to Y.		
	1.4 Have students complete problems 1-5.		
2. Write story problems involving proportions.	2.1 Have students solve problem #6.	2.1 Indian village problems.	
	2.2 Have other students review problems written by classmates. Goal: To make problems coherent and they are to solve.		2.2 A class collection of problems could lead to the making of a small book or generally filed in a problem solving resource box.

SCIENCE: NATIVE AMERICANS - GRADE B

Assign. SCOPE OF LESSON STATEMENT Provide an experience in making and using Native American tools.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will describe Native American tools and materials from which they were made.	1.1 Review types of rock with class. Discuss which types of rock were used by Native Americans for tools. 1.2 Fieldtrip to Museum of the Rockies, MSU. (See Social Studies, p. 4). 1.3 Discuss the tools observed in the museum of the Rockies exhibit and read about it in previous lesson.	1.1 Science or geology texts.	1.1 This lesson should follow Social Studies: Native Americans, p.4. Reading: Native Americans, pp. 1,3, & 4.
2. Will attempt to construct a Native American tool in a similar historical method.	2.1 Have students make tools similarly as possible as described in 1.2.	2.1 Rock; leather; sticks; etc. THE AMERICAN INDIAN CRAFT BOOK, Marz & Nona Minor. Lincoln, University of Nebraska Press, 1978. (Bozeman Public Library).	

SCIENCE: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Create an understanding of Native American historical foods and remedies by studying edible plants that grow locally.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will identify edible plants.	1.1 Have students study plant guides.	1.1 Plant Guides - Examples: COMMON EDIBLE AND USEFUL PLANTS OF THE WEST, Muriel Sweet. Naturegraph Co., 1962, Healdsburg, CA. WILD EDIBLE AND POISONOUS PLANTS OF ALASKA, Cooperative Extension Service, University of Alaska, 1976. HOW TO PREPARE COMMON WILD FOODS, Darcy Williamson. Darcy Williamson, 1978, McCall, ID.	
	1.2 Have students compile own guides by drawing or collecting pictures of common edible plants and noting characteristics.		
	1.3 Ask students to bring plant samples to class to identify.		
2. Will prepare edible plants for eating.	2.1 Take students on field trip to collect and prepare edible plants.	2.1 Cooking utensils, etc.	2.1 Arrange field trip.

SOCIAL STUDIES: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Develop the concept of mapping in reference to Native American tribes in Montana and/or Gallatin County.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will recall the procedures in making or labeling a map.	1.1 Initiate a class discussion on making and labeling a map. Discuss directions, physical features, use of key, etc. Draw practice map.	1.1 Blackboard & chalk or chart.	1.1 Prepare a practice map.
2. Will label a map of Montana and/or Gallatin County with its Native American tribes.	2.1 Have students label outline maps with physical features and Native American tribes, corresponding to a key. Each student can label own map, or work in group on wall size map.	2.1 Outline maps of Montana and/or Gallatin County (desk size or wall size). Research materials: Encyclopedia; Montana History Text. Ex: MONTANA OUR LAND AND PEOPLE, William L. Lang & Rex C. Myers, Pruett, 1979, Boulder, CO.	2.1 Post maps.

SOCIAL STUDIES: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Develop understanding of Native American dwelling sites and hunting by visiting the Madison Buffalo Jump State Monument.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will interpret the environment of the Madison Buffalo Jump State Monument for evidence of Native American dwellings and hunting.	1.1 Read from STONE CIRCLES IN THE MONTANA ROCKIES to set mood of Native American dwelling site.	1.1 STONE CIRCLES IN THE MONTANA ROCKIES. See Reading: Native Americans. (Native Americans folder - Teachers' Resource Center).	1.1 This lesson can be a follow-up to Reading: Native Americans, p. 4. Arrange field trip to site of Madison Buffalo Jump State Monument.
	1.2 Explore site for evidence of dwellings and hunting.		

SOCIAL STUDIES: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Recreate Lewis & Clark's discovery and exploration of the Headwaters area by visiting the Headwaters State Park.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will trace Lewis & Clark's expedition through the Headwaters area and compare its present state with that of 1805.	1.1 Review lessons mentioned in experience chart.	1.1 See Resource List: Headwaters State Park. Brochures: "Headwaters Herald," includes map. (Native Americans folder: Teachers' Resource Center).	This lesson should follow: Reading: Native Americans, pp. 2-4. Language Arts: Native Americans, p. 1.
	1.2 Tour park referring to map.		
	1.3 Encourage students to compare their discoveries with those of Lewis, Clark and Sacajawea.		
	1.4 Discuss what impact their expedition had on the area and the Native Americans living there.		

Assign. SCOPE OF LESSON STATEMENT Develop understanding of Native American history by touring the Native American exhibit at the Museum of the Rockies.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will recognize Native American artifacts and describe their role in Native American life.	1.1 Visit the Native American exhibit at the Museum of the Rockies. Read fact cards and discuss displays.	1.1 Museum of the Rockies, MSU.	1.1 Make arrangements for tour guide if possible.

ART: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Provide an opportunity for artistic expression using Native American art/craft techniques.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will create an art project using techniques and materials similar to those used by Native Americans.	1.1 See art/craft books. Examples: moccasin-making; beadwork; basketry; painting.	1.1 Art/craft books: THE AMERICAN INDIAN CRAFT BOOK, Marz & Nono Minor. Lincoln, University of Nebraska, 1972. (Bozeman Public Library). INDIAN ART IN AMERICA, Frederick J. Dockstader. New York, Promontory Press. (Bozeman Public Library). See Resource List: Native American Studies. Basketry: Molly King, Gallatin Gateway School. CRAFTS OF THE NORTH AMERICAN INDIANS, Richard C. Schneider. New York, Van Nostrand Reinhold Co., 1972. (Teachers' Resource Center).	

ART: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Develop concept of Native American dwellings and provide practical experience in building models.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will describe Native American dwellings.	1.1 Have students read about and discuss Native American dwellings.	1.1 Encyclopedias & library books. See Reading: Native Americans. Examples: STONE CIRCLES IN THE MONTANA ROCKIES. "The Tipi as Mobile Domicile." THE AMERICAN INDIAN CRAFT BOOK, Marz & Nono Minor. Lincoln, University of Nebraska Press, 1972. (Bozeman Public Library).	

MUSIC: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Provide an opportunity to experience Native American music.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will listen and respond to Native American performers.	1.1 Ask Native American performers to to discuss their music and instruments, and perform for the students.	1.1 See resource list: Native American Studies, MSU.	1.1 Contact Native American Studies office at MSU to find out when the annual Pow-wow will be held in Bozeman.

MUSIC: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Review the concept of symbolism in studying Native American drums.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will describe the symbolism of Native American drums.	1.1 Review the meaning of symbolism and discuss examples.	1.1 Examples: THE AMERICAN INDIAN CRAFT BOOK, Marz & Nono Minor. Lincoln, University of Nebraska, 1972. (Bozeman Public Library). RITUAL OF THE WIND, Jamake Highwater. New York, Viking Press, 1972. (Bozeman Public Library).	1.1 See Music: Native Americans, p.1.
	1.2 Have students read about Native American drums and drum making.		

HEALTH, PHYSICAL EDUCATION & RECREATION: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Experience and learn the Native American Bone Game.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will construct a set of "bones" and "arrows" to be used in the Bone Game.	1.1 Have students make "bones" and "arrows" from sticks and leather strips or thread.	1.1 Sticks: 4 - approximately 3" long 10 - approximately 12" long Leather strips or thread. THE NEW GAMES BOOK, Andrew Fluegelman. San Francisco, Headlands Press, 1976. pp. 79-81.	
2. Demonstrate knowledge of the rules and skills of the Bone Game by playing the game.	2.1 Have students review and discuss rules. 2.2 Discuss meaning of the Bone Game to Native Americans. 2.3 Have students play the game.		

HEALTH, PHYSICAL EDUCATION & RECREATION: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Experience and learn the Native American games of "Great Plains," "Pina," and "Hagoo."

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will demonstrate knowledge of the rules and skills of the games of "Great Plains," "Pina," and "Hagoo."	1.1 Have students discuss rules, strategy, and origin of the "Great Plains" game.	1.1 Frisbee or large marker, THE NEW GAMES BOOK. Andrew Fluegelman. San Francisco, Headlands Press, 1976.	
	1.2 Have students discuss rules, strategy, and origin of "Pina" game, and play.	1.2 THE NEW GAMES BOOK, p. 131.	
	1.3 Have students discuss rules, strategy, and origin of "Hagoo" game, and play.	1.3 THE NEW GAMES BOOK, p. 135.	

HEALTH, PHYSICAL EDUCATION & RECREATION: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Expose students to Native American dance.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will observe a Native American dancer and experiment in expressing themselves in dance.	1.1 Ask MSU Native American resource person to demonstrate Native American dance and explain their origin. 1.2 Encourage students to participate in dance.	1.1 See resource list: Native American Studies See also: THE AMERICAN INDIAN CRAFT BOOK. Marz and Nono Minor. Lincoln, University of Nebraska, 1978. (Bozeman Public Library). RITUAL OF THE WIND. Jamake Highwater. New York, Viking Press, 1977. (Bozeman Public Library).	1.1 Arrange for resource person from MSU to demonstrate and teach dance.

HEALTH, PHYSICAL EDUCATION & RECREATION: NATIVE AMERICANS - GRADE 8

Assign. SCOPE OF LESSON STATEMENT Create an understanding of Native American historical methods of preserving food.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Will explain Native American historical methods of preserving food.	1.1 Have students read resource materials to discover methods of preserving foods and report to class.	1.1 Encyclopedias & books on Native Americans.	
	1.2 Have students experiment in preserving food; i.e., prepare jerky, dry fruit, etc.	1.2 Foods and equipment.	1.2 Arrange for foods: (wild meat for jerky, etc.).

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step V. Lesson Plans

Sub-Unit: Education - Grades K-8

READING: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation of early education through various reading experiences.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Identify the role education played in pioneering the valley.	1.1 Select numerous book selections from libraries and display about the room several days before orally reading.	1.1 Library books on topic of schools and education. THE SMALLEST BOY IN THE CLASS, Bem, Jerald FRECKLE JUICE & 4TH GRADE NOTHING, Blume, Judy THE TRUE FRANCINE, Brown, Marc DID YOU CARRY THE FLAG TODAY, CHARLIE, Caudill, Rebecca HERBIE'S TROUBLES, Chapman, Carol ELLEN TEBBITS, OTIS SPOFFORD, RAMONA THE BRAVE, Cleary, Beverly FIRST GRADE TAKES A TEST WHEN WILL I READ?, Cohen, Mirriam ETHANS FAVORITE TEACHER, Coleman, Hila NOTHINGS FAIR IN FIFTH GRADE, DeClements, Barthe THE GREAT BRAIN AT THE ACADEMY, Fitzgerald BACK TO SCHOOL WITH BETSY, Haywood, Carolyn MERRY MOUSE SCHOOLHOUSE, Hulman, F. SOMETIMES I DON'T LIKE SHOO, Hogan WILLABY, Isadora, R. ROOM 10, McCarthy, Agnes TEACHER'S PET, Miles, Mishka SOUP ON WHEELS, Peck VERONICA GANZ, Sachs, Marilyn GREAT BIG SCHOOLHOUSE, Scarry, Richard THE DUNKARD, Selden, George MYSTERIOUSLY YOURS, MAGGIE MARMELSTEIN, Sharmat, Marjorie BECAUSE OF MADELIINE, Stolz, Mary TIMOTHY GOES TO SCHOOL, Wells, Rosemary CROW BOY, Yashima, Taro	

READING: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation of early education through various reading experiences (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
	1.2 Prepare bulletin board with title "The ABC's of Learning" and pictures of early schools. This could be used for a trivia board or for a learning center board.	1.2 Bulletin board, letters, pictures (see IDEALS NOSTALGIA magazine), pictures of desks, equipment, trivia questions, etc.	
	1.3 Read exerpts from magazines and historical accounts.	1.3 COBBLESTONE MAGAZINE, "Old Time School," Nov. 1981, MONTANA HISTORICAL SOCIETY MAGAZINE, Dec. 1983.	
2. Identify the role educators play in life tody compared to yester years.	2.1 Read orally to class about different teachers and classroom settings.	2.1 NONE TO GIVE AWAY, Townsend, Elsie Doig, (A Montana author, who taught in area). Grades 6-8. LITTLE HOUSE BOOKS, Wilder, L.E. Grades 2-4. MR. LITTLE, Peck, R.N. Grades 4-8. WHERE DOES THE TEACHER LIVE? Feder, Paula. Grades 3-5. TEACH US, AMELIA BEDELIN, Parish, Peggy. Grades 1-3.	
	2.2 Provide books for independent reading about teachers.		
	2.3 Read about famous women educators and their contribututions. Grade 4-8.	2.3 Time Life, WILD WEST SERIES: THE WOMEN.	2.3 Keys record on chart of famous person and her accomplishment for later reference for a writing activity.
	2.4 Read about teacher certification requirements now and 75 years ago.	2.4 See County Superintendent of School's office for resource.	

LANGUAGE ARTS: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Generate various writing activities that will lead to a richer appreciation of the education process.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1 Write various creative stories using independent, small group class assignments.	1.1 Write creative stories about various events in the life of a rural school by selecting a topic from the chart. (All grades).		1.1 Topics for the creative stories: a) "The Great Winter Freeze In," b) "The Triplets," c) "A Horse In School?" d) "The Day Blacky Disrupted Reading Groups," e) "The Lunch Pail Mystery," f) "Hunting for Racoons," g) "The New Playground Equipment," h) "Day of the Stove Fire," i) "A Day in the Life of a New Teacher," j) "The Skunk Came to School."
	1.2 Write individual books entitled "Hands that Carried the Spark of Learning." Each chapter or segment will refer back to chart on famous education.	1.2 Writing paper.	
	1.3 Write editorial on a certain topic.		1.3 Topics for editorials: a) Rural schools should/shouldn't be continued, b) Teachers are overpaid/ underpaid, c) Class sizes should be..., d) Schools could meet individual student needs if they would..., e) "Back to basics" is a must!
	1.4 Write a class book depicting the history of a rural or city school in the valley.		
	1.5 Write a position paper on the value of education.		

LANGUAGE ARTS: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Generate various writing activities that will lead to a richer appreciation of the education process (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
2. Utilizes the RAFT approach to writing various assignments.	2.1 Present the following formula to students (see chart).	2.1 Experience chart.	2.1 Role Audience Form Topic
	2.2 Ask students to assume the role of a lunch pail (R), write a complaint (F), to mother about the contents you have housed this past week (T). Make recommendations as to the need for a healthy lunch for your owner.	2.2 Use RAFT resources for writing.	2.2 Same.
	2.3 Ask students to assume the role of an ink well on a desk in a classroom in the year 1900 (R). Write to students (A), a list of rules (F) about proper conduct in the classroom (T).	2.3 Same.	2.3 Same.
	2.4 Ask students to assume role of American Flag mounted on the chalkboard (R). Write a journal entry (F) to self (A) about what limpressions8 you have of the new male teacher "just wet behind the ears" (T).		

LANGUAGE ARTS: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Generate various writing activities that will lead to a richer appreciation of the education process (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
3. Study the use of journals and make daily entries.	3.1 Bring into class examples of journals written by famous people and examples in literature.	3.1 Books: GATHERING OF DAYS: A NEW ENGLAND GIRLS JOURNAL, Blos, Joan W., ARTHUR FOR THE VERY FIRST TIME, DIARY OF ANN FRANK, LEWIS AND CLARK JOURNAL, MacLachlan, Patricia, ON THE WAY HOME: THE DIARY OF A TRIP FROM SOUTH DAKOTA TO MANSFIELD, MISSOURI IN 1894, Wilder, L.E., BEARIS HOUSE, Sacks, Marilyn THE OLD WEST: WOMEN, Time Life p. 92	3.1 Chart of journal entries: 1) If I were principal..., 2) If I were the custodian..., 3) Yesterday my teacher..., 4) Our school could really use..., 5) The lunch program is..., 6) Recess could be more fun if..., 7) My teacher is the funniest when..., 8) My favorite part of the year is..., 9) Being the school secretary is..., 10) A new friend..., 11) Monday reflections: reflect on events of weekend..., 12) Week revisited: recapping the weeks events.
	3.2 Write daily journal entries using ideas on chart.		
	3.3 Make entries in the class journal.	3.3 Experience chart.	
4. Write various poems about classroom events.	4.1 Review the various types of poetic forms.	4.1 "Poetry Plenty," Schaffer, Frank.	
	4.2 Write a class poem entitled, "The Classroom Is My Spaceship."		
	4.3 Write individual poems about, "School Days - School Days."		

LANGUAGE ARTS: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Generate various writing activities that will lead to a richer appreciation of the education process (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
5. Write letters for specific purpose.	5.1 Review form and rules for letter writing.	5.1 Overhead projector, experience chart.	
	5.2 Write letters to students in rural areas (or cities) inquiring.		
	5.3 Write a letter of application for a teaching position in the year 1910.		
	5.4 Read back to class about a child who writes letters.	5.4 DEAR MR. HENSHAW, Cleary, Beverely.	
6. Create vocabulary lists of related terms.	6.1 Make a class dictionary of terms.		
7. Apply reference skills to various subject areas and topics.	7.1 Make an alphabetized list of the area schools.	7.1 Experience chart.	
	7.2 Research the schools' names and write research papers on their namesakes.		
	7.3 Use thesaurus for application of adjectives into creative writing skills.		
	7.4 Write newspaper articles about events in a school either 75 years ago, 100 years ago or 100 years from now.		

MATH: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Develop math skills through various activities.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Apply skills of measurement to activities.	1.1 Measure the classroom in meters and centimeters and record on chart. 1.2 Measure the classroom in yards and feet and record on chart. 1.3 Measure objects in the school in centimeters and meters and record. 1.4 Measure objects in inches and feet and record. 1.5 Write story problems using information from measurement activities.	1.1 Experience chart.	1.1 Graph of items measured.
2. Design classroom plans using graphing techniques.	2.1 Plat room plan on graph paper, grades 5-8. 2.2 Plan classroom using blocks on large sheet of poster paper, grades 2-4.	2.1 Square inch, graph paper. 2.2 Poster paper, blocks.	
3. Predict the growth of education in the valley.	3.1 Plot a bar graph after studying the growth of education in the Gallatin valley. 3.2 Make a prediction as to growth over the next few years.	3.1 Bar graph paper, studies from Office of County Superintendent.	
4. Recognize the element of time through the use of time line.	4.1 Construct a time line of schools built and used in the valley, grades 3-8.	4.1 Poster paper.	

MATH: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Develop math skills through various activities (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
5. Apply various computational skills according to appropriate grade level.	5.1 Compute percentages of salary increases for teachers over the past 75 years, grades 7-8.	5.1 Information from County Superintendent.	
	5.2 Compute the numbers of equipment in various classrooms, grades 5-6.		
	5.3 Compute the ratio of students to classrooms in various buildings and teacher/student ratios, grades 4,5,6.	5.3 Poster paper.	
	5.4 Count the books per classroom and plot on a pictograph, grades K-3.	5.4 Poster paper.	
6. Use estimating techniques.	6.1 Estimate the cost of text books and equipment found in a classroom.	6.1 Northern and Colburn School supply catalogues.	
	6.2 Estimate the number of teachers in the valley according to elemetary and secondary enrollment.	6.2 Information from County Superintendent and State Superintendent of Schools.	
7. Construct word problems (all levels).	7.1 Demonstrate the qualities needed in a solvable story problem.	7.1 Index cards, experience chart.	7.1 Example of a good story problem and one that is lacking in information.
	7.2 Have students write various problems that deal with educational situations and use various mathematical processes.		
	7.3 File in a box and make available for independent work.		
8. Apply money skills to consumer situations and compare prices of years past to present day costs.	8.1 Bring in catalogues, newspapers of at least 50 years of age.	8.1 Chronicle newspapers, Sears catalogues, Museum of Rockies.	
	8.2 Write word problems using data.		
	8.3 Compare costs of items by bar graphing costs.		

SOCIAL SCIENCES: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Develop the concept of time using time lines.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create a time line with reference to events of students own life.	1.1 Initiate a class discussion of time lines. Do a sample of the chart.	1.1 Chart.	1.1 Time line of teacher's life.
	1.2 Have students identify major events in their lives and fit them into a time line.	1.2 6 x 18 inch drawing paper.	
	1.3 Have students orally present their time line to the class.		
2. Create a time line with reference to early education in the valley.	2.1 Begin the time line with the year 1800 and mark it in 10 year intervals.		
	2.2 Put time line across bulletin board.		
	2.3 Have each student make their own personal copy.		
	2.4 As students learn about an event in the history of education, place the event on the time line.	2.4 Markers.	
	2.5 Record history of a rural school on time line using different color on time line.		

SOCIAL SCIENCES: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT 1) Develop interviewing skills and apply them with first hand experiences.
2) Develop an appreciation of the valley's pioneers in education.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Learn interviewing skills.	1.1 Brainstorm the steps needed when interviewing someone.	1.1 Experience chart.	1.1 Record ideas students brainstorm on the chart.
	1.2 Role play interviewing skills by interviewing each other as if a new student.		
	1.3 Have students draw a card, and, as teams work on interviewing skills.	1.3 Cards with situations written on them such as: getting a job, winning a sports event, the president of U.S., a diplomat from another country, a new principal.	
2. Apply interviewing skills to self and others.	2.1 Brainstorm questions students might ask a retired teacher.	2.1 Experience chart.	2.1 List of quesions class might ask such as: a) years teaching, b) qualifications, c) conditions of first school experience, d) salary, e) funny happening, f) most embarrasing moment, g) why a teacher.
	2.2 Invite retired teachers to class.		
	2.3 Using questions from chart, interview the retired teachers invited to class.		
	2.4 Students will record responses.	2.5 Clipboard, pencils.	
3. Record data from interviewer.	3.1 Using responses, students will then write a summary of facts.	3.1 Pencils, paper.	
	3.2 Students will place the summaries in a class book entitled, "On the Road to Learning."	3.2 Class book.	

SOCIAL SCIENCES: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Investigate the role of parochial and mission schools on the valleys educational process.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define the term and identify its purpose.	1.1 Define the word "parochial" and "mission."	1.1 Dictionaries, court house records, newspapers, Fort Ellis records, Holy Rosary Church records, encyclopedias.	
	1.2 Investigate purpose of the parochial schools in the valley.	1.2 THE OLD WEST: WOMEN, Time Life.	
	1.3 On chart list the advantages and disadvantages of mission schools.		1.3 Parochial/Mission Schools ADVANTAGES/DISADVANTAGES
	1.4 Record dates of the local parochial and mission schools on class time line.	1.4 Marker.	

SOCIAL SCIENCES: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Develop mapping skills as an integral part in the study of valley education.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Label outline maps of county.	1.1 Have several maps of the area available for reference.	1.1 Maps of: a) state b) Gallatin Valley c) city Relief maps from MSU, Forest Service maps.	
	1.2 Have students label the Gallatin County or a state map outline.	1.2 State outline with county lines drawn in.	
	1.3 On enlarged county map, draw in the following. Each child will fill in own desk copy. a) rivers, b) mountains ranges, c) county seat, d) highways, e) railroads, f) creeks, g) lakes, h) towns i) MSU j) forest land, BLM land, private, k) direction key l) symbol key m) mileage scale.	1.3 County outline-one on chart and desk copies for students.	1.3 Enlarged outline of Gallatin County for teacher use.
2. Locate schools on a county map.	2.1 On a second county map, locate the schools ever in existance.	2.1 County Superintendent's office records, overhead transparency, with overlay for tracking schools.	

SOCIAL SCIENCES: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an awareness of the history behind the establishment of Montana State University.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Defines the terms given and recognize establishment of MSU as a "land grant college."	1.1 Define the terms "Land Grant College," college, university.	1.1 Montana Hall photographs, MSU Library.	
	1.2 Identify the process the state used to set up the university system and MSU's place in the scope.		
2. Make an MSU time line while studying the history of MSU.	2.1 Make a class time line of the development of MSU's history.		
	2.2 Take a field trip to MSU and arrange for a guided tour of its facilities.	2.2 Call the Student Affairs' Office for information about tour chart.	
3. Make a map of MSU, then and now and compare growth.	3.1 Divide class in half with one group doing a map of MSU as it was when established as a college.	3.1 Registrar.	
	3.2 Second group will do MSU now.		
	3.3 Invite Registrar to speak on student growth over the years.	3.3 Registrar from MSU.	
4. Recognize the contributions MSU has made to county and state.	4.1 Make a list in the chart of what MSU has contributed to education.	4.1 Chart.	4.1 Record informaion on chart.

SOCIAL SCIENCES: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Collect, label and research educational tools used for learning.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Define terms appropriate to the learning process.	1.1 Have students make a list of tools appropriate of the learning process. 1.2 Illustrate terms. 1.3 Make a class dictionary of terms.		1.1 Vocabulary; i.e., horn book, lard pail, tobacco tin, slates.
2. Contribute items used over the many years in valley education.	2.1 Encourage students to ask parents or, community citizens for antiques used in schools years ago. 2.2 Set up a museum in classroom where students can bring their contributions, such as lunch pails, old books, desks, old photographs, slates, horn book, etc. 2.3 Set up trivia questions about certain items.	2.1 Museum of Rockies, parents, citizens, grandparents, antique shops.	
3. Investigate the history of the computer and its contributiuon to today's education.	3.1 Invite a sales rep from Computerland (or ay computer shop) to discuss how computers are used in education. 3.2 Study the history of the computer and its uses.	3.1 Posters on computers, Computerland (infor and personel).	

SOCIAL SCIENCES: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Compare the use of transportation for students.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. List the types of transportation appropriate to transporting students to and from school.	1.1 On the experience chart list different modes of getting to school as the class brainstorms.	1.1 Chart.	1.1 ON OUR WAY TO SCHOOL Then / Now walking / walking horse / car wagon / bus mule / car pool buggy / bike stagecoach / skateboard
2. Construct posters advertising the need for good bus safety.	2.1 Discuss proper bus safety.	2.1 Poster paper, markers, paint.	
	2.2 Make posters that will convince students of proper bus safety.		
3. Role play situations portraying the need for good bike safety rules.	3.1 Discuss proper bike safety.		
	3.2 Role play situations of good bike safety rules.	3.2 Index cards with role playing situations listed.	

SOCIAL SCIENCES: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation of the value of equipment in a school if it were suddenly eliminated or had to be replaced.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Construct a list of replaceable items in a school.	1.1 Come into class and tell the students to imagine that the school has been destroyed by fire. They are without a school. 1.2 They have the job of making a list of items to be replaced. 1.3 Give students 5 minutes to list as many things they can think of. 1.4 Then organize group and have them go about the school and see how many more they can add to list. 1.5 Encourage near exact numbers of items.	1.1 Clipboards, experience chart.	1.1 Record the items students found and then record their second score.
2. Estimate the value of the replaceable items.	2.1 Using the list from above, set to task the job of figuring an approximate value of the burnt items. 2.2 Figure total of expense to replace school from ground up.	2.1 School supply catalogues, newspapers.	
3. Discuss needs of safety rules in schools.	3.1 Discuss safety rules needed in a school. 3.2 Practice five drill procedures.		

SOCIAL SCIENCES: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Develop an appreciation of the alphabet through a study of its history.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Study the history of the alphabet and the influences various cultures played in the development of our present day alphabet.	1.1 Bring in many different encyclopedias to class along with numerous alphabet books.	1.1 Encyclopedias, numerous alphabet books.	1.1 Terms: pictograph, ideographs, hieroglyphs.
	1.2 Research the Greek and Roman influences.		
	1.3 Research the use of the Egyptian signs.		
2. Investigate the various ways authors have presented the alphabet.	2.1 Give each child an alphabet library book.		
	2.2 Have each tell class how the alphabet was portrayed; i.e., the use of circus theme, animals, holidays, etc.		
	2.3 Discuss the various illustrating techniques used.		
3. Write their own class alphabet book around a theme of schools.	3.1 Assign the class the chore of creating their own alphabet around objects/events.		
	3.2 Decide on a script, be it prose or poetry.		

ART: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunities for artistic expression using various medium.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Create models of rural schools and city schools.	1.1 Divide class into equal groups.	1.2 Photographs of the area schools.	
	1.2 Have each group select a school and study its structure.		
	1.3 Each group will design a model of their school.	1.3 Various materials (cardboard).	
2. Make various designs using hieroglyphic symbols.	2.1 After researching the term, "hieroglyphics," make a chart of uniform symbols.	2.1 Chart.	2.1 Make a class chart of symbols.
	2.2 On brown wrapping paper, create a story using symbols.	2.2 Brown wrapping paper or brown poster paper, paint, brushes.	
	2.3 Crumple paper, so it looks old. Burning edges or tearing them also adds affect.		
	2.4 Post around room for enjoyment.		
3. Build diaramas of schoolrooms that represent how things were years ago or are today.	3.1 Invite a sales rep from Miniatures and Doll House Shop. Have her bring several diaramas that would represent the detail.	3.1 Joyce's Doll House, Bozeman.	
	3.2 Read excerpts from THE BORROWERS, (a book about tiny people).	3.2 THE BORROWERS (book).	
	3.3 Make a display of one of the borrowers rooms, referring to the books description.		

ART: EDUCATION - GRADE K-8
ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunities for artistic expression using various medium (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
	3.4 Have students then select a situation.	3.4 Chart.	3.4 DIARAMA CHOICES: school then/now playground then/now schoolroom then/now playground today eating lunch then/now favorite day in school then/now winter days then/now school picnic reciting the ABC's getting to school then/now
	3.5 Divide class into groups.	3.5 Small figures, show boxes, construction paper, wallpaper, cardboard, popsicle sticks, yarn, thread, material scraps, paint, markers, glue.	
	3.6 Using a shoe box as basis, create a diarama that would represent the period they chose.		
	3.7 Cover fronts with plastic wrap.	3.7 Plastic wrap.	
	3.8 Display diarama in halls, libraries, etc.		
4. Create apple dolls and dress as a library book character from one of the library books on schools, teachers, journal characters.	4.1 Have students select their favorite character from one of the class books displayed and read about schools.	4.1 Refer to list of books in reading section.	
	4.2 Have students each bring in an apple and a table knife.	4.2 Apples, knives, popsicle stick.	
	4.3 Instruct students to peel apples and carve out eyes and mouth.	4.3 Paper towels	
	4.4 Stick apple on a popsicle stick. and let dry for a week.	4.4 Pop bottle (for drying).	

ART: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Provide opportunities for artistic expression using various medium (continued).

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
	4.5 Place another stick cross ways and wire on in center. (This will form arms).	4.5 Popsicle stick, wires, nylons.	
	4.6 Wrap sticks with old nylons until thick.		
	4.7 Dress dolls buy using material scraps (or can send home and have parents do costume).	4.7 Material scraps.	
	4.8 Display dolls and have students make place cards.	4.8 Poster paper, markers.	
5. Create a mural of a classroom of the future.	5.1 Discuss what school will be like 100 years from now by examining pictures of skylab and the shuttle.	5.1 Chart, space shuttle posters or pictures, Skylab pictures, poster paper for mural, paint.	
	5.2 Brainstorm design and ideas.		5.2 Record ideas on chart.
	5.3 Set up mural paper and make assignments.		
	5.4 Allow students to enter their ideas and suggestions, creating a school of tomorrow.		
6. Create a collague of the 3 R's.	6.1 Divide class into 3 groups.	6.1 Magazine pictures, glue, construction paper.	
	6.2 Give each group one of the 3 R's.		
	6.3 Task is to find magazines, pictures, etc. that represent their area and make collague.		
	6.4 Allow each group to explain their choices.		

HEALTH AND PHYSICAL EDUCATION: EDUCATION - GRADE K-8

ASSIGN. SCOPE OF LESSON STATEMENT Develop health attitudes toward properly planned meals.

OBJECTIVE	ACTIVITIES	RESOURCE MATERIALS	EXPERIENCE CHART
1. Make a list of healthy snacks they can enjoy after school and on weekends.	1.1 Generate a discussion of healthy vs. junk food. 1.2 Record data on chart. 1.3 Using newspaper ads find samples of good snacks cut out and place in grocery sack.	1.1 Extension Office resources and pamphlets. 1.2 Grocery ads from newspaper, grocery sack.	1.1 Record ideas on chart: HEALTHY/JUNK
2. Create healthy menues that children can have for lunch.	2.1 Generate a discussion of the 4 food groups. 2.2 Plan several menues for a week by dividing class into 5 groups and assigning each group the task of creating a menu for the day. 2.3 Share menues. 2.4 Could vote on favorite and prepare it in school if money and resources allow.	2.1 Magazines, posters of 4 food groups from Extension Office.	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

WILDLIFE - GRADES K-1

antlers

burrow

cave

claws

conservation

den

domestic

endangered species

environment

extinct

food chain

footprint (tracks)

forest

habit

hatchery

herd

hibernate

hoofs

imaginary

mammal

naturalist

paws

pollution

protection

refuge

survival

tame

taxidermist

wild

woods

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

SHELTER - GRADES K-1

apartment

community

condominium

duplex

electricity

energy conservation

energy (solar, wind, wood, coal, electric)

extinct

hypothermia

mobile home

neighborhood

structure

Step VI. Vocabulary

AGRICULTURE - GRADE 2

agriculture

chores

cinquain

cotton

crops

cud

dye

erosion

farm

farm product

food chains

food groups

greater

irrigation

leather

less than

market

minerals

nutrition

soil

transportation

various farm animals

vegetable

vitamins

weather

wool

Step VI. Vocabulary

ETHNIC BACKGROUNDS - GRADE 2

accent

costume

country

ethnic

foreign

heritage

holiday

instrument

language

recipe

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

TIMBER - GRADE 3

- bark
- branches
- environment
- folklore
- forest products
- habitats
- heritage
- leaves
- myth
- natural materials
- natural resources
- needles
- nonrenewable resources
- offspring
- outdoor
- pine cones
- propagation
- recycle
- renewable resources
- roots
- seeds
- suckers
- "tree cookie"
- trunk

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

EARLY EXPLORERS - GRADE 4

bull-boat

calicoes

cordelle

dugout

expedition

John Colter

keelboat

kinnikinnick

mackinaw

Sacajawea

Scannon

stockade

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

RANCHING - GRADE 4

- acre/acreage
- agriculture
- barbed wire
- brand
- cash crops
- cultivate
- currency
- drought
- dry-land farming
- erosion
- expedition
- fallow
- fertilizer
- germinate
- granary
- grassland
- homestead
- honyocker
- irrigation
- livestock
- overgrazing
- range
- reaper
- rod-measurement
- roundup
- rustler
- section
- shearing
- silo
- simple machine
- soil
- spring house
- tallow
- tanning
- threshing
- tillable
- wind generator
- windmill
- yoke of work cattle

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

RAILROADS - GRADE 5

brakeman
bridge
buffalo
caboose
Chinese
coal
conductor
dynamite
engine
engineer
explosive
fireman
foreman
gang
German
grade
Indian
Irish
journey
locomotive
mountain
Norwegian
passenger
plain
plateau
railroad
railway
railway tie
relay switch
roundhouse
shaker
sledgehammer
station
steam
ticket
trestle
tunnel
valley
wedge
western

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

CITIES AND TOWNS - GRADE 5

- autobiography
- biography
- chemicals
- closing
- culture
- diary
- environment
- erosion
- fashion
- ghost town
- greeting
- hazard
- heading
- indigenous
- inside address
- letter body
- migratory
- petroleum
- pioneer
- pollution
- precaution
- proofread
- sewer
- signature

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

GOVERNMENT - GRADE 6

analyze

ancestory

apathy

architecture

civilization

convert

duplicate

electoral process

environment

evolve

exposure

flow chart

government officials

historical

intensity

interpret

investigate

participation

patriotic

primitive

progressive

technical

technology

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

LIFESTYLES - GRADE 6

READING

boom town
consumer
debate
dredging
economic
ethnic
frontier
independent
mobility
mother lode
panning
prosperous
sluice

LANGUAGE ARTS

homesteader
malapropism
perspective
pun

MATH

cost
demand
earnings
luxury
necessity

SCIENCE

commerce
geology
grazing
hypothesis
vegetation

SOCIAL STUDIES

map key
map legend
modernize
settlement
symbols

ART

artifact
culture
medium
physical
map
texture

MUSIC

culture
ethnic
rhythm

HEALTH/PHYSICAL EDUCATION

disease
smallpox

Step VI. Vocabulary

ECOLOGY - GRADE 7

circle graph

community

degrees (in an arc or circle)

diameter

ecology

ecosystem

environment

environmental impact statement

food web

haiku

melody

niche

organism

percent

radius

symbiosis

UNIT: GALLATIN HISTORY PAST TO PRESENT

Step VI. Vocabulary

RECREATION - GRADE 7

advertising terms:
  bandwagon
  emotional words
  repetition
  testimonial
  transfer

carrying capacity

environmental impact

gross income

ground water

investments

law suit

lease

propaganda

public land

revenue

square footage

scale

site

situation

web of life

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VI. Vocabulary

GEOGRAPHY - GRADE 8

acid rain
agriculture
alpine
alternative
application
appropriate
asset
aurora borealis
avalanche

bartar
bluff
butte
byline

calculate
cenozoic
circumference
cone
coniderous
conservation
contamination
critique
cross-country
cube
cutline
cylinder

demonstration
drought
dwelling

era
erosion
expectation

fantasy
fault
fertile
ficticious
flash flood
formation

geographical
geography
geologic
geology

headline
hypothesis

insulate

kayak

legend

mesozoic
myth

opportunity
option
ozone

paleozoic
parallelogram
pelt
perimeter
phenomenon
pre-cambrian
precipitation
population density
prism

radiation
recreation
relief map
riparian
rural

solar

tall tale
telemark
thermal
thesaurus
trapezoid

uplift
urban

variable
vegetation
volume

Step VI. Vocabulary

NATIVE AMERICANS - GRADE 8

chert

compare

contrast

journal

obsidian

pirogue

projectile point

rendezous

tipi

travois

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

Ag in the Classroom
Ag Representative from Banks
Animals
Antique Shops
Arrowhead Collection - Ray Bergstrom
Bates, Grace
Beef & Pork Producers
Beartrap Canyon Mt. Men - Hillary Donaldson
Black Powder Gun Club
Bridger Canyon Cookbook
Bureau of Land Management
Burlingame, Professor
Cemetaries
Census Bureau
Chamber of Commerce
Cheese Factory - Gallatin Gateway
Cobblestone Magazine
Contra Dancing People - Callers and Musicians
County Extension, MSU
Dairy Farm - MSU
Darigold Tour
Department of Natural Resources and Conservation
Dutch Dancers, Manhattan, Amsterdam, Churchill
Fire Department
Fish and Game
Foreign Exchange Students:
  a. Bozeman High School
  b. MSU
Forest Service
Ghost Towns - Les Nielson
Headwaters State Park - Trident
Historical Homes Tour - Willson Avenue
Honey-Bee Farm - Ron Barr, west of Four Corners
Human Resources
Law and Justice Center
Lumber Company:
  a. Idaho Pole
  b. Plum Creek, etc.

Step VII. Resources (continued)

Montana Folklife Project - Missoula
Montana Department of Highways
Montana Department of Tourism
Montana Historical Magazine
Montana Power
Mountain Log Home Builders
M.S.U. Instructors:
  a. Geography
  b. Native American Studies
Museums:
  a. Courthouse
  b. Gallatin County Historical Society - Old Jail
  c. Historical Museum - Helena
  d. Museum of the Rockies - MSU
  e. Headwaters State Park
Newspaper - Morgue
Newspapers
Old Coyote, Sally
OPI - Trunk of artifacts, coloring books, traditional stories
People from other ethnic backgrounds
Police Department
Public Library
Quilting Society
Rendezvous
Restaurant Menus - Overland, Baachus, Union Hall, Bistro, Dutch Oven
Science-Math Resource Center - MSU
Senior Center
Senior Citizens
Ski Bridger Bowl
Soil Conservation Service
Superintendent of Public Schools
Supermarket - meat cutters
Taxidermist
Teachers
Teachers' Resource Center
Townsend, Elsie Doig
Virginia City
Western Heritage Center - Billingss (trunks and museum)
Willson School Dist. #7 - Film Library

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

AGRICULTURE IN THE CLASSROOM

Contact:

Jim Moss 4400 Dead End Road Belgrade, MT 59714	388-4683	Offers packets with classroom ideas and contact people for visiting local farms. Also has lists of audio visuals prepared by national livestock organizations.

AGRICULTURE REPRESENTATIVE IN BANKS

Contact:

Jim Drummond First Security Bank		Can tell you names of people to visit on farms. Also can inform you of recent officers in the local beef and pork producers organizations.
Chris Ruiquim First Bank		
Charlie Switzer Montana Bank		
Doug Tillet Citizens Bank		

ANIMALS

Contact:

Allan Harmata 4756 Itana Circle Bozeman, MT 59715	586-3747	He has a permit to keep and rehabilitate eagles. One of the stipulations of the permit is that he uses the eagles for educational purposes.
Vince Yannone Education Department Fish & Wildlife Department Helena, MT 59601		Very tight schedule, call him in the fall, may able to come in spring.

ANTIQUES/SHOPS

Contact:

Brass & Wood Antique Shop Terry Sullivan/Bob Arnold 223 E. Main Bozeman, MT 59715	586-5090	Guided tours of shop are given. Terri would be happy to come into your classroom to talk on general antiques. Her speciality is in antique cameras. Bob Arnold restores old furniture in the basement of the shop and would be happy to demonstrate his work.

ANTIQUES continued

Broken Hart Antiques and Ranch Sandy Hart/Doris Kober 73800 Gallatin Road Gallatin Gateway, MT 59730		Sandy has a large collection of old costumes as well as her general antiques. She would be happy to give tours of the shop.
John DeHaas 1021 S. Tracy Ave. Bozeman, MT 59715	586-2276	Member of the National Counsel for Historic Preservation. John expressed delight in coming into the classroom to talk about architectural history, bringing it down to a child's level on simple forms they can recognize. He is also an expert on Ghost Towns.
Lehrkind Mansion Bill Davis, Owner 719 N. Wallace Bozeman, MT 59715	586-1214	Bill will give tours of the mansion with no charge to school groups. This is an old restored mansion furnished completely with antiques.
John Mandeville 1121 Mandeville Lane Bozeman, MT 59715	587-7832	John is owner of the Mandeville Auction Service and has a lot of experience working with antiques. He would come into your classroom as a resource person.
Cindy Nelson 5100 Bozeman Trail Road Bozeman, MT 59715	587-8656	Cindy is a licensed antique appraiser and has a large antique collection. She specializes in "country Americana." She would enjoy coming into the classroom to speak and show her antiques.
Voss Inn (Bed & Breakfast) Mary Tonn 319 S. Wilson Bozeman, MT 59715	587-0982	Tours are given the first Tuesday of each month. They are cautious about tracking up their establishment but would consider small (5-6 students) group tours in the dry season.
Terri Wolfgram 712 South 10th Bozeman, MT 59715	587-2714	Terri specializes in antique clothing from the 20's. She would be happy to come and talk to your class and bring her "wardrobe" to share.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

ARROWHEAD COLLECTION

Contact:

Leroy Bergstrom 2265 Thorpe Rd. Belgrade, MT 59714	388-6878	Has extensive arrowhead collection. Suitable for older grades as far as speaking. Any level will be interested in collection.

BEARTRAP CANYON MT. MEN AND RENDEZVOUS

Contact:

Fred Donaldson
Box 999
Big Sky, MT 59716

BEEF PRODUCERS

Contact:

Tom Milesnick President for 1985	388-4180	May be willing to come into classroom and give talk or let you visit their farm.

Call Ag. Rep. for recent officers

BIG SKY OF MONTANA

Contact:

Susan Kaufman
Director of Public Relations
Big Sky of Montana Ski Area
P.O. Box 1
Big Sky, MT 59716

BIG SKY RESORT ASSOCIATION

Contact:

Conrad Tausend P.O. Box 100 Big Sky, MT 59716	995-4999

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

BOZEMAN POLICE DEPARTMENT

Contact:

Ed Malone, Head, Crime Stoppers St. Larry Connor	586-3311	The Police Department offers a variety of services for schools. These range from visits by individual officers (you choose the topic, relevant to his work) to a wide variety of films on various topics, (these are mostly Disney films related to all types of child safety). Tours of the facility are also available.

BRIDGER BOWL

Contact:

Bridger Bowl Terry Abelin, General Manager 15795 Bridger Canyon Rd Bozeman, MT 59715	586-2787	For information concerning Bridger Bowl and history.

CEMETARIES

Contact:

Bozeman and Surrounding Area
- City Cemetary, Bozeman
- Sunset Gardens, Bozeman
- Meadowview, Manhattan
- Fairview, Three Forks
- Willow Creek
- Springhill Community Cemetary
- Reese Creek Cemetary
- Morgan Cemetary, North of Bozeman on the Rocky Mountain Road
- Maudlow Family Burial Cemetary
- East Gallatin Cemetary (West of Reese Creek)
- Dry Creek Cemetary
- Logan Cemetary
- Salesville, Gallatin Gateway
- Catholic Cemetary, Bozeman

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

CEMETARIES continued

City Cemetary, Bozeman John McNill, Superintendent/ Julie VanFossan at City Hall		They have burials and records dating back to 1864. From 1910 to present their records are complete. These records are open to the public.
State of Montana Dept. of Records/Statistics John Wilson, Bureau Chief Helena, MT	444-2614	Their death and burial records date back as far as 1860. However, to obtain copies of a specific death record, you must submit a written request and have it approved by the board.
Dokken-Nelson Funeral 113 S. Wilson Ave Bozeman, MT 59715	587-3184	They have books that record name, death date and cemetary where buried, beginning with the year 1900 to present. They have Old West death records.
Dahl Memorial Chapel Bozeman, MT 59715	586-5298	They have records of name, death date, and cemetary where buried from 1945 to present.
Montana Room Bozeman Public Library		They have several publications which list various Gallatin County cemetaries and burial names and dates. The Daughters of the American Revolution have their DAR SPONSORED CEMETARY BOOK on file here.
MSU Library Special Collections		Have various publications on file with data about Gallatin County Cemetaries.
Eleanor Buzalsky 302 South Wilson Bozeman, MT 59715	587-3254	Eleanor has done extensive research and extraction of old mortuary records. Her research is on file in Special Collections, MSU Library.
Latter Day Saints Church South Third and Henderson Bozeman, MT 59715		The genealogy library is housed here.
Mrs. Wallace Hecox 7615 Springhill Road Belgrade, MT 59714	388-6373	Mrs. Hecox is a member of the Daughters of the American Revolution and the Historical Society. They have done some research on Gallatin County Cemetaries.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

CENTENNIAL MURAL

This display of art work shows the history of Bozeman. The mural is located on the southwest corner of Main and Rouse.

Contact:

Mike Hoey	586-6219

COBBLESTONE MAGAZINE

Contact:

Cobblestone Publishing, Inc. 20 Grove Street Peterborough, NH 03458-1454	History magazine for young people. Published monthly- $ 2.25 single copy $18.50 12 issues

CONTRA DANCING

Contact:

Back Porch Pickin' Parlor Larry Barnwell 407 W. Mendenhall Bozeman, MT 59715	587-9776	Musicians who play & "call" music for a variety of group dances. Many dances are of specific ethnic origin and might apply to groups or communities of people settled in the Gallatin Area.

COUNTY EXTENSION OFFICE

Contact:

Mrs. Grace Bates 6800 Amsterdam Rd Amsterdam, MT	282-7220

DARIGOLD

Contact:

Darigold Terry Fukado 1001 North 7th Avenue Bozeman, MT 59715	586-5425	To arrange tours of plant.

DUTCH DANCERS

Contact:

Bill Cok	282-7208	Group of 4 couples (8 adults) who dance to music in Native costumes.
Bill Van Egmond	282-7649	

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

HONEYBEES

Contact:

Mr. Ron Baar Box 10787 Little Holand Rd Manhattan, MT 59741	282-7933	Will visit classrooms and give a general informative talk about beekeeping. Can bring some of the equipment he uses and his protective suit and mask. May be able to bring a sample of honey.

HUMAN RESOURCES

Human Resources, (people in the community, parents, grandparents), are our most valued information source. These may be used as needed in obtaining all kinds of information. A survey of the community may be used to file this information.

Contact:

Elsie Doig Townsend 1469 Yadon Road Manhattan, MT 59741	284-6667	Local author, was a rural school teacher. Will visit classrooms and give informative talk about her days in the Gallatin Valley in the 1900's. She wrote, "None to Give Away," the inspiring story of a young widow left with 5 small children to raise on a ranch in Montana.
LeRoy Bergstrom 2265 Thorpe Rd. Belgrade, MT 59714	388-6878	Has extensive arrowhead collection. Suitable for older grades as far as speaking. Any level will be interested in collection.

Politics Contact:

Grace Bates 6800 Amsterdam Road Manhattan, MT 59741	282-7220	Long time resident of Amsterdam/Churchill area. Very active in politics. Resource for colorful antedotes of local area.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

LAW AND JUSTICE CENTER

Contact:

County Attorney - Mike Salvagni	587-3161
Clerk of Court - Lorraine VanAusdol	586-7691
Coroner's Office - Doris Fisher	586-7444
District Judges	
Thomas Olson -	587-7013
Joseph Gary -	587-0505
Justice of the Peace - H.P. Goan	587-3431
Sheriff's Dept. - Capt. Carl Smith Gary Scheidecker	586-4871
Youth Probation - David Gates	587-4213

The learning opportunities available at the Law and Justice Center are as varied as the county offices located there. Both District Judges, the County Attorney and the Justice of the Peace are willing to speak to students and tell about their particular function in county government. The Corner's office has information available not only on that particular office, but also on DUI and the dangers of alcohol abuse. The Sheriff's Department also has a variety of programs available, (films, individual officers who will speak on a multitude of subjects, etc.). The Probation Office is willing to have visitors or to come and speak on matters relating to juvenile law and detention. Tours of the facility are available through the Sheriff's Office. Call individual offices if there is a particular facet of county government you would like to concentrate on.

LOG HOMES

Contact:

Froniter Log Homes 388-4615
Wally Kahler or Wife
2021 Alaska Rd. South
Belgrade, MT 59714

Model Log 763-4141
Jerry Gray
75777 Gallatin Rd
Bozeman, MT 59715

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

MADISON BUFFALO JUMP STATE MONUMENT

Contact:

Dick Ellis
Regional Park Supervisor
Dept. of Fish, Wildlife & Parks

MEAT PACKING COMPANIES

Contact:

Glt'n Valley Packing Comp. NE of Bozeman	586-4931	
North Side Meat Market 434 Cobb Hill Road Bozeman, MT 59715	586-5447	
Happel's Meat Processing & Smoking Service 4700 Gooch Hill Road Bozeman, MT 59715	587-8972	
MSU Dairy Farm	994-2800	Will give field trips.

MISSOURI HEADWATERS STATE PARK

Contact:

Dick Ellis Regional Park Supervisor Dept. of Fish, Wildlife & Parks	586-5419	Information on state parks, monuments, and fishing access sites. Brochures including "Headwaters Herald," (a newspaper format of information on headwaters area).
Tom Grason	586-5419	
Doug Haberman	586-5419	

Step VII. Resources

MONTANA FISH AND GAME

Contact:

Montana Fish and Game 8695 Huffine Lane Bozeman, MT 59715	586-5419	Movie (available to schools) - Buffalo Jump near Three Forks - Elk Winter Range - Headwaters State Park - Wonderful Animal Shots Brochures - Bannack near Dillon which was the first territory capital and the first gold discovery Slide series by Dick Ellis, Parks Manager

MONTANA FOLKLIFE PROJECT

Contact:

Montana Arts Council 1280 South 3rd Street West Missoula, MT 59801		Photographs, audiotapes, record albums, slides, stories and skills are available upon request. Topics include homesteading, cow camps, round-ups, weaving, churning butter, etc.

MONTANA POWER

Montana Power offers free K-12 materials to teachers as well as classroom presentations. The materials include teaching units, films, videotapes, computer software, posters, samples, tours, and printed materials.

MONTANA STATE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

Contact:

Water Rights Bureau 1201 East Main Bozeman, MT 59715	586-3136	This state department deals with issuing water rights, researching deeds and abstracts, well drilling permits, and stock pond development. Representatives from this office are willing to be guest speakers. Contact: Scott Compton

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

MONTANA STATE TRAVEL PROMOTION

Contact:

Mont. State Commerce Dept. 444-2654
1424 9th Avenue
Helena, MT 59601

M.S.U. INSTRUCTORS

Contact: Individuals listed below to discuss your needs. They will tell you how they can help.

Native American Studies - Pat Morris	994-3881	Federal Indian Law and Policy, Indian Religions and Education.
Walter Fleming	994-3883	Culture
Barney Old Coyote	994-3882	Pre-Bozeman History
Earth Science - John Montagne	994-6915 994-3331	Retired
John Alwin	994-6914	Physical and Cultural Geography
Kathy Hansen-Bristow	994-6912	Effect of Climate on Plants & Animals
Historic Preservation Officer - Martha Catlin	586-3321 Ext. 221	Tour brochure available with overview history of region; report with narrative of history, includes bibliography.

M.S.U SCHOOL OF ARCHITECTURE

Contact:

Montana State University Bozeman, MT 59717	994-4405	Contact School of Architecture office or the Dean to see if guest speakers are available that quarter.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

MUSEUMS

Contact:

Gallatin County Courthouse West Main Bozeman, MT 59715		No tours given, but interesting small museum on second floor, may conduct own tour.
Gltn Cnty Hist. Socty 317 West Main Bozeman, MT 59715	586-0805	
Grace Bates	282-7220	Call Tues. or Thurs. 2-4 PM for tour of old jail.
Museum of the Rockies Ken Karsmizki, Currator University Campus Bozeman, MT 59717	994-2251	Ken is available to meet with teachers of this unit and help them locage specific information. He has an extensive bibliography of books and survey. There is a half hour video program on settlement in the Gallatin Valley. This program may be rented by schools or viewed at the museum. Ken has a vertical file arranged by topic available for teacher use. He also has a book entitled, How to Teach Local History in the Classroom."

NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY (NCAT)

Contact:

NCAT P.O. Box 3838 Butte, MT 59701	494-4572	Non-profit organization which encourages the widespread application of appropriate technologies that help alleviate problems of low-income people. (Passive Solar Applications; Super-insulation Applications; Wind Power; Small Hydro-Plants, Solar Hot Water Systems, etc.)

Books available through NCAT:

1. THE PASSIVE SOLAR ENERGY BOOK, Edward, Mazria
2. NATURAL SOLAR ARCHITECTURE A PASSIVE PRIMER, Wright, David
3. THE FIRST PASSIVE SOLAR HOME AWARDS, U.S. Dept. of Housing & Urban Development
4. EARTH SHELTERED RESIDENTIAL DESIGN MANUAL, Underground Space Center - University of Minnesota
5. EARTH SHELTERED HOUSING DESIGN, Underground Space Center - University of Minnesota
6. LOW-COST PASSIVE SOLAR GREENHOUSES, National Center for Appropriate Technology
7. ENERGY SAVING HOUSES, Wade, Alex

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

NATIONAL PARK SERVICE

Contact:

Yellowstone National Park District Office East of West Yellowstone West Yellowstone, MT	646-7313	Information available or guest speaker to explore a variety of topics relating to the park. Example topics: Grizzly Bear Habitat; Thermal Activity; History of the Park; Bison and Elk Herd Populations; Effects of Snowmobile and Cross-Country Ski Activity on Winter Habitat, etc.

NEWSPAPERS

Contact:

Bozeman Daily Chronicle Nancy Robison	587-4491	THE CHRONICLE offers a variety of student learning experiences. These range from tours of the facility itself to research oportunities through back issues on microfiche.

OFFICE OF PUBLIC INSTRUCTION (OPI)

OPI provides a catalog of films in their Audio Visual Library that teachers can order for viewing in their classroom. The rental fee is about $7.00/film. The toll free number for more information is 1-800-332-3402.

PEOPLE FROM OTHER ETHNIC BACKGROUNDS

Many ethnic groups contribute to the growth of an area. These groups are vital in obtaining information. Churches and social groups would prove helpful for finding such information.

PORK PRODUCERS ORGANIZATION

Call Ag. Rep. for recent officers. May be willing to let you visit farm or may have information for guest speakers.

Step VII. Resources

PUBLIC LIBRARIES

Public libraries provide a wealth of information for many topics of interest.

Contact:

Bozeman Public Library 220 E. Lamme	586-4787
Livingston Public Library 228 W. Callender	222-0862
Three Forks Public Library 121 2nd Avenue East	285-3747

QUILTER'S GUILD OF THE NORTHERN ROCKIES

Contact:

Jane Quinn	587-8213	The Quilter's Guild has a number of people who are knowledgeable in the area of quilting, both in the contemporary sense and in the historical sense. Ms. Quinn is the person to call if a general history of the art of quilting is desired. She can also put you in touch with the people of greatest expertise if you are interested in a particular phase of quilting.

SENIOR CENTERS

Contact:

Belgrade Senior Citizen's Friendship Club Belgrade, MT 59714	388-4711
Bozeman Senior Social Center 807 North Tracy Avenue Bozeman, MT 59715	586-2421
Hillcrest Retirement Center Bertha Clow	587-7708

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

SOIL CONSERVATION SERVICE

Contact:

Soil Conservation Service Federal Bldg - 4th Floor Bozeman, MT 59715	587-5271 Ext. 4229	Willing to arrange for map loans, classroom speakers, etc., pertaining to soils of the Gallatin Area.
Ron Nadwornick	586-4374	

SUPERINTENDENT OF PUBLIC SCHOOLS

Contact:

Margaret Brown County Super. of Schools P.O. Box 956 Bozeman, MT 59715	586-6711	

SUPERMARKETS

Contact:

Albertson's 200 S. 23 Avenue Bozeman, MT 59715	586-4785	Educational tours are available.
Buttrey Food Stores Buttrey's Shopping Center Bozeman, MT 59715	587-4211	May come in; no guided tours are available.
Safeway Store, Inc. 901 West Main Bozeman, MT 59715		Guided tours are given.
Van's IGA 912 N. 7th Bozeman, MT 59715	587-1890	Guided tours are given.
Ryan's Wholesale Grocers George Shuman, President Billings, MT	657-1400	Guided tours available. Demonstrations in produce, meat, bakery, grocery products, supermarket electronic front-end. May have resource people available to come into the classroom.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

TEACHERS

Contact:

Molly Siddoway King 405 South 5th Bozeman, MT 59715	586-8327	Basketry using natural native materials.
Gallatin Gateway School	763-4417	

TEACHERS' RESOURCE CENTER

The Teachers' Resource Center is located in #126 Reid Hall, on the MSU campus. In addition to maintaining a curriculum library, the Center has various types of resource materials and audio visual equipment, which is available to teachers in Gallatin County.

The following books and materials may be used with the Wildlife and Shelter (K-1 Sub-unit). Additional materials may be found at the TRC.

1. THE TEACHERS BOOK OF LISTS, Madsen, Sheila and Betty Gould
2. LEARNING CENTERS FOR YOUNG CHILDREN, Maxim, George W.
3. CURRICULUM DEVELOPMENT LIBRARY INDEX, 1978 Ed., Fearon & Pitman
4. ELEMENTARY SCHOOL LIBRARY COLLECTION: A GUIDE TO BOOKS AND OTHER MEDIA, 12th Edition
5. SYMBOLS OF MONTANA, Myers, Rex C.
6. PHOTO HISTORY OF LIVINGSTON - BOZEMAN COAL COUNTRY, Whithorn, Bill and Doris
7. ANIMAL TALES, compiled by Lyfick, Warren
8. YOUNG FLASH THE DEER, Burgess, Thorton W.
9. CORA THE CROW, Cecil, Mirabel
10. WILD ANIMALS I HAVE KNOWN, Seton, Earnest Thompson
11. RABBIT TALES, McCormack, John E.
12. MRS. PELOKE'S SNAKE, Oppenheim, Joanne
13. STEVEN AND THE GREEN TURTLE, Cromie, William J.
14. WATER - RAT'S PICNIC, Uttley, Allison
15. A GUIDE TO LITERATURE FOR YOUNG ADULTS, Cline and McBride
16. BAKER SCIENCE PACKETS - Nature study packets for grades 1-9.
17. INVESTIGATIONS IN ECOLOGY - PLANTS, ANIMALS AND ENVIRONMENTS, Bell and Howell
18. ENVIRONMENTAL SCIENCE CENTER - WHERE ARE THE ANIMALS?
19. A GOLDEN NATURE GUIDE: BIRDS; FISH; GAME BIRDS; MAMMALS; REPTILES AND AMPHIBIANS, Golden Press
20. A FIELD GUIDE TO ANIMAL TRACKS, Houghton Mifflin
21. ANIMAL BEHAVIOR, BSCS Laboratory Block
22. ANIMAL ADAPTATION, Holt, Rinehart and Winston

Teachers' Resource Center books and materials listed for Native Americans (Grade 8 Sub-units).

See Multicultural Bilingual Sections:

History; Social Life and Customs; Literature; Education; Native Language; Tribal Publications; Programs, Policies, Rights and Responsibilities.

Step VII. Resources

TIMBER

"Project Learning Tree," is an environmental education project jointly sponsored bythe Western Regional Envronmental Education Council and the American Forest Institute. It is an activity guide for grades K - 6.

TIMBER COMPANIES

Plum Creek Inc. Belgrade Division 400 Jackrabbit Lane Belgrade, MT 59714	388-4221	Tours of the mill.
Idaho Pole East Cidar Bozeman, MT 59715	587-5181	Brochures and pamphlets
Timberland	586-5541	
Jean Hawks		Jean has extensive knowledge of the forest timber business dating back to the early 1900's when logs were floated out of Porcupine. He is in the process of writing a book about the area.
Doug Hansen		Forester
Gary Burnett		Forester

U.S. DEPT. OF AGRICULTURE

Contact:

U.S. Dept. of Ag. Room 227-W Washington, D.C. 20250	202-447-5727	Available free to teacher, "Ag in the Classroom," sample curriculum, resource guide, brochure, bookcover and sticker, FREE.

U.S. FOREST SERVICE

Contact:

Betty Schmitt Public Information Supervisor's Office	587-5271	Films; maps; hand-outs; speakers

VIRGINIA CITY

Contact:

Vigilantes Club P.O. Box 295 Virginia City, MT 59755	No phone

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

WESTERN HERITAGE CENTER

Contact:

Western Heritage Center 2822 Montana Avenue Billings, MT 59101	248-4901	Museum in Billings and "Mailable Trunks," full of objects and teaching ideas. Trunk topics include: Mining; Native Americans; Fur Trade, etc. Postage (UPS) is the only cost.

WILLSON SCHOOL

Contact:

Mr. Michaelson, Principal
Montana Earth Science Series

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

WILLSON SCHOOL FILM LIBRARY

Resource list of 16mmfilms located in Willson School for Agriculture, (Grade 2 Sub-unit).

Stories/Farm Life

MP 0610 County Fair
0114 Day at the Fair

Stories/Farm Animals

MP 0339 Adventures of Two Little Goats
0134 Big Red Barn
0338 Frisky the Calf

Farm Work

MP 1041 Good Life, The (parts of this filmed in Montana)
0206 Visit to a Honey Bee Farm

Products

0554 Sheep, Shearing and Spinning: A Story of Wool

Science

MP 0779 Soil: An Introduction

Weather Science - A series

MP 0851 Pierrot and Rain and Snow (6 min.)
0852 Pierrot and the Sun (5 min.)
0853 Pierrot and the Wind (4 min.)

Plant Life

MP 1071 What Plants Need for Growth (award winning film)

0951 What do Seeds Do?

0778 Gardening: An Introduction

MP 0100 Garden Plants and How They Grow

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources

AGRICULTURE - GRADE 2

Located in Willson School Film Library

STORIES/FARM LIFE
MP 0610 County Fair
   0114 Day at the Fair

STORIES/FARM ANIMALS
MP 0339 Adventures of Two Little Goats
   0134 Big Red Barn
   0338 Frisky the Calf

FARM WORK

MP 1041 Good Life, The, (Parts of this filmed in Montana)
   0206 Visit to a Honey Bee Farm

PRODUCTS
   0554 Sheep, Shearing & Spinning: A Story of Wool

SCIENCE

MP 0779 Soil: An Introduction

WEATHER SCIENCE - A Series

MP 0851 Pierrot and Rain and Snow (6 min.)
   0852 Pierrot and the Sun (5 min.)
   0853 Pierrot and the Wind (4 min.)

MP 0103 Water, Water, Everywhere--Observing Things About Us

PLANT LIFE

MP 1071 What Plants Need for Growth (Award winning film)

   0951 What do Seeds Do?

   0778 Gardening: An Introduction

MP 0100 Garden Plants and How They Grow

Step VII. Resources (continued)

The following books and tapes are located at the Bozeman Senior High School Library. (March 1983)

GALLATIN COUNTY BICENTENNIAL ORAL HISTORY TAPES

(All tapes are numbered 978.6 GA-58)

1. DON ANDERSON
Board sidewalks, dusty streets, horses, street car,
Fort Ellis, opera house, trips into Gallatin Mountains.

2. LES ANDERSON
History of High Line Canal, race between High Line and
Farmer's Canal, sprinkling in 1950 and effects,
decline in sprinklers, financial problems of irrigation
companies.

3. FRANK AUSTIN
Railroading, unionization, World War I, Argonne Forest
offensive, poison gas.

4. MRS. MABEL BALLANTYNE
Homestead life near Rudyard, Montana, about 1915.
Bozeman street cars and sweet pea festival.

5. CLARENCE BARTLETT
West Yellowstone, stage drivers in Park, bootleggers.

6. EIDA BENSON
Covered Wagon Ranch, Gallatin Canyon.

7, 8. SETH BOHART
Sedan ranch community, game in Gallatin Canyon,
impromptu rodeos.

9. MARGARET B. (MRS. GEORGE) BOYLAN
Mining in Timberline, Bozeman tunnel, ranch at Dogtown
(near Monforton School).

10, 11. DR. MERRILL BURLINGAME
"The Unnatural History of Bozeman," Federal aid in
growth, town and gown - Montana State College.

12, 13. LAWRENCE CHRISTIE
Bridger Canyon farming and community in the 1920's,
dairy farming.

14. CLARK BERG
Transportation and work with horses in Yellowstone Park.

15. JOSEPH W. CLAWSON
Elk hunting, gold mining, logging, trapping.

16. MARY CLONINGER
Homesteading near Three Forks, description of Salesville,
Mexican laborers.

17. HEWLEN NOBLE (MRS. EARL) CREASY
Bozeman, 1900 - 1920, Kenyon-Noble Company.

18. MR. AND MRS. ALFRED K. DAHL
Horseshoeing, World War I, story of a draft dodger,
army life, General Pershing.

19, 20, 21. PAUL DAVIDSON
Bozeman, 1896-1919, Montana State College - fraternities,
hazing, causes World War I.

22. WILEY DAVIS
Alder Gulch and Virginia City.

23. ELSIE (MRS. JAMES) DEJONG
The Churchill community.

24, 25. INA CHRISTIE (MRS. G.) DENTON
Christie family, Bridger Canyon, telephone systems.

26. DELLA DOYLE
Bozeman - early 1900's sweet pea festival, seed
pea industry.

27. ISABELLE KARST DURNAM
Galatin Canyon, Karst Ranch, lettuce farm.

28, 29. RAY AND ORRIE FIELDS
Bridger Canyon driving tour.

30. MRS. MARIE SHEDD FLAHERTY
Willow Creek homesteading.

31. JANE (MRS. EVANS) FORSYTH
Bridger Canyon dude ranch.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources (continued)

32. **MABEL FULLER**
West Yellowstone teacher in the 1920's.

33. **MRS. WANDA GAU**
West Yellowstone logging operations, 1930's.

34, 35. **MARGARET GEE**
Country school teaching, Reese Creek farm life.

36. **TONY GRACE**
Ranching in the West Yellowstone area.

37. **ALONZO B. HADLEY**
Madison Hotel, West Yellowstone.

38. **AUDREY HAINES**
Experiences as Park Rangerin Yellowstone Park.

39. **PETER HANSEN**
Danish immigrant, homesteader, World War I overseas veteran.

40. **CARL HAUN, SR.**
Spanish-American war veteran.

41. **DEE BRANAMEN HECHT**
Centennial Valley bird sanctuary.

42. **OTIS HOEKEMA**
Dutch immigrant, salesman

43. **ED IVERSON**
Belgrade, airport

44. **RUTH JENKINS**
Three Forks: electrification of Milwaukee Railroad, Chinese and Japanese, earthquake of 1925.

45. **BERNIDINE JOHNSON**
West Yellowstone earthquake, 1959.

46. **SAM JOHNSON**
Norwegian immigrant, Logan, Trident Cement plant, dryland farming.

47, 48. **ROY KEISTER**
Oldest practicing attorney in Montana.

49. **WALT KERZENMACHER**
West Yellowstone, Grayling area.

50. **PEARL KRAAI**
Childhood on farm in the Holland settlement.

51. **ORA MICHENER LEMON AND STANLEY LEMON**
Gallatin Canyon.

52. **ART LENEHAN**
Ranching, forest service work, moonshining.

53. **VIOLET LILLY**
Pioneer family, early Manhattan and Three Forks.

54. **EINAR LINDVIG AND REGINA LINDVIG**
Farming during the Great Depression.

55. **ART LOCKHART**
Logging and logging camps.

56. **NELLIE (MRS. JACK) LUTOVSKY**
Life in the Walker settlement.

57. **JESSIE MARSH**
Author, Bozeman street car.

58, 59. **ELEANOR (MRS. JAKE) MAST**
Bridger Canyon history to 1900; patterns of life in Bridger Canyon, 1930-1975.

60. **JAKE MAST**
Cattle ranching in Bridger Canyon.

61. **MINERVA (MRS. THOMAS) MORGAN**
Pioneer family, early 1900's.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources (continued)

62. **THELMA MULTZ**
Pioneer family, Three Forks, Old Town.

63. **FRANK MURRAY**
West Yellowstone activities.

64. **BETTY EAGLE NELSON**
West Yellowstone Eagle family.

65. **OLE OMA**
Gallatin Cooperative Creamery, Bridger dairy farm, Norwegian immigrant.

66. **DOROTHY PAUGH**
Changes in home-making, 1911-1975.

67. **JOHN C. PAUGH, SR.**
Changes in ranching, work as County Agent.

68. **ELIZABETH (MRS. R.C.) PURDUM**
Bozeman in early 1900's, Bozeman Hot Springs, ranch childhood.

69. **HERKLES AND VIVIAN RIGHTENOUR**
West Yellowstone: sawmills, airport.

70. **SALLY RILEY**
West Yellowstone.

71. **BOB ROSS**
Soil conservation in Montana since the drought of the 1930's, principles of range conservation.

72. **GERALD SCHAPPER**
Dutch immigrant, Manhattan area farmer, government grain surveyer.

73. **RUDOLPH SCHUTTER**
Ranch life near the Holland settlement.

74. **GEORGE SINTON**
Irish immigrant, Republican presidential elector, ranching near Manhattan.

75. **MR. AND MRS. ROLAND STAEBLER**
West Yellowstone.

76. **NORA STUART**
West Yellowstone.

77. **WALT STUART**
West Yellowstone.

78, 79. **GEORGE STUBLAR**
Chestnut mining community, West End farming, World War I.

80. **THREE FORKS LIBRARY GATHERING**
Three Forks in the early 1900's.

81. **WILLABELLE (MRS. ERIC) TONN**
Residents, homesteads, and activities in Gallatin Canyon in the 1890's.

82. **LEETA TOWNSEND**
Manhattan farm life.

83. **DOROTHY VICK**
Gallatin Canyon, dude ranching.

84. **HELEN (MRS. HENRY E.) WALKER**
Walker settlement farm life.

85. **ALF WALTON**
Springhill.

86. **NORA WEAVER**
Farm activities north of Belgrade.

87, 88. **MABEL WEINRICH**
William Walton, Pioneer; Weinrich homesteading.

89. **VERA (MRS. RALPH) WILCOX**
Three Forks, barbering, World War I homefront.

Step VII. Resources (continued)

90. **FLOYD WILSON**
Belgrade government, storekeeper.

92. **JENNIE BALLARD**
School teacher, 1930's to 1950's.

93. **VERN CHANDLER**
Packing and wrangling in the 1930's.

94. **JOHN HAYNES**
History of Gallatin Canyon and Big Sky.

95. **CHRIS SCHLECTEN**
Bozeman in the early 1900's, 1933 MSC Yearbook, photography.

96. **EMMA LOUISE (RILEY) SMITH**
First Black immigrant in Montana.

97. **JOHN WORTMAN**
Farming in the early 1900's trip through Yellowstone Park in 1915.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources (continued)

YELLOWSTONE NATIONAL PARK

917.8 B64b	Bonney, Orrin H. and Lorraine, BATTLE DRUMS AND GEYSERS; THE LIFE AND JOURNALS OF LT. GUSTAVUS CHEYNEY DOANE, SOLDIER AND EXPLORER OF THE YELLOWSTONE AND SNAKE RIVER REGIONS. Chicago, Swan Press, 1970.
978.7 C44y	Chittenden, Hiram Martin, THE YELLOWSTONE NATIONAL PARK. Cincinnati, Robert Clarke Co., 1911.
917.87 H12y	Haines, Aubrey L., YELLOWSTONE NATIONAL PARK: ITS EXPLORATION AND ESTABLISHMENT, Washington, U.S. National Park Service, 1974.
978.7 L26d	Langford, Nathaniel Pitt, THE DISCOVERY OF YELLOWSTONE PARK. JOURNAL OF THE WASHBURN EXPEDITION TO THE YELLOWSTONE AND FIREHOLE RIVERS IN THE YEAR 1870, Lincoln, The University of Nebraska Press, 1972.

BOZEMAN AND THE GALLATIN VALLEY

978.6 B77t	Brister, Marjorie and Minnie Paugh, TOUR OF HISTORIC SITES OF BOZEMAN, May, 1969.
R 978.6 B92g	Burlingame, Merrill G., GALLATIN COUNTY'S HERITAGE: A REPORT OF PROGRESS, 1905-1976. Gallatin County Bicentennial Committee, 1976.
978.6 B92h	Burlingame, Merrill, A HISTORY OF MONTANA STATE UNIVERSITY, Montana State University, 1968.
641.5 C16	CANYON COOKERY: A GATHERING OF RECIPES AND RECOLLECTIONS FROM MONTANA'S SCENIC BRIDGER CANYON, Bridger Canyon Women's Club, 1978.
B C378a	Chase, Mary Ellen, A GOODLY FELLOWSHIP, New York, Macmillan Co., 1939. (Chapter 7 - Life in Montana - description of Leora Hapner).
978.6 C47h	Churchill-Amsterdam Historical Society, A GOODLY HERITAGE: A HISTORY OF THE CHURCHILL AND AMSTERDAM AREA OF MONTANA, Bozeman: Color World, nd.
978.6 D36f	DeHaas, John N. and Bernice W., FOOTLIGHTS AND FIRE ENGINES, Montana Magazine of Western History, 1967.

Step VII. Resources (continued)

BOZEMAN AND THE GALLATIN VALLEY (continued)

978.6 D42g	Denning, Frances, GROWING PAINS: THREE FORKS, MONTANA, Three Forks, School District, J-24, 1975.
B H21a	Hapner, Leora M., AS I LOOK BACK, Bozeman, Montana State College, 1960.
978.6 H81e	Houston, E. Lina, EARLY HISTORY OF GALLATIN COUNTY, Bozeman, Bozeman Courier, 1933.
978.6 IV3p	Iverson, Ronald J., THE PRINCESS OF THE PRAIRIE: A HISTORY OF BELGRADE, MONTANA, nd.
917.86 N21	National Registry of Historic Places, CENTRAL AVENUE, SOUTH, SOUTH WILLSON HISTORIC DISTRICT, BOZEMAN, MONTANA, National Park Service (1978), (Photographs of the homes described are appended).
R 301.31 M76i	Stuart, David G., IMPACTS OF LARGE RECREATIONAL DEVELOPMENTS UPON SEMI-PRIVATE ENVIRONMENTS: THE GALLATIN CANYON CASE STUDY, JUNE 1974, Bozeman: Montana Agricultural Experiment Station, Montana State College, 1974.
978.6 W58c	Whithorn, Bill and Doris, PHOTO HISTORY OF LIVINGSTON-BOZEMAN COAL COUNTRY. Pray, Montana, Bill and Doris Whithorn, nd.
978.6 W67h	Williams, Lyle K., HISTORICALLY SPEAKING: STORIES OF THE MEN AND WOMEN WHO EXPLORED AND SETTLED THE MISSOURI RIVER HEADWATERS, Three Forks, Montana, (Bicentennial Project, 1976).
978.6 D29s	Davis, Jean, SHALLOW DIGGIN'S: TALES FROM MONTANA'S GHOST TOWNS, Caldwell, Idaho, Caxton Printers, 1963.
978.6 D59v	Dimsdle, Thomas J., THE VIGILANTES OF MONTANA, OR POPULAR JUSTICE IN THE ROCKY MOUNTAINS, Norman, Oklahoma, University of Oklahoma Press, 1953
978.6 J62b	Johnson, Dorothy M., THE BLOODY BOZEMAN: THE PERILOUS TRAIL TO MONTANA'S GOLD, New York, McGraw-Hill, 1971.

Step VII. Resources (continued)

BOZEMAN AND THE GALLATIN VALLEY (continued)

978.6 L25v	Langford, Nathaniel Pitt, VIGILANTE DAYS AND WAYS: THE PIONEERS OF THE ROCKIES, New York, A.L. Burt Co., 1912.
978.6 M61g	Miller, Don C., GHOST TOWNS OF MONTANA, Boulder, Colorado, Pruitt Publishing Co., 1974.
978.6 P11g	Pace, Dick, GOLDEN GULCH: THE STORY OF MONTANA'S FABULOUS ALDER GULCH. Dick Pace, 1962.
978.02 St9p	Stuart, Granville, PROSPECTING FOR GOLD FROM DOGTOWN TO VIRGINIA CITY, 1852-1964, Lincoln, University of Nebraska Press, 1925.
917.86 W83m	Wolle, Muriel Sibell, MONTANA PAY DIRT; A GUIDE TO THE MINING CAMPS OF THE TREASURE STATE, Athens, Ohio, Ohio University Press, 1963.

MILITARY AND TRADING POSTS

978.6 M61m	Miller, Don C. and Stan B. Cohen, MILITARY AND TRADING POSTS OF MONTANA, Missoula, Pictorial Histories Publishing Co., 1978.
355.7 K84m	Koury, Michael J., MILITARY POSTS OF MONTANA, Bellevue, Nebraska, Old Army Press, 1970.

THE CATTLE INDUSTRY

B Ab25a	Abbott, E.C. and Helen Huntington Smith, WE POINTED THEM NORTH: RECOLLECTIONS OF A COWPUNCHER, New York, Farrar & Rinehart, 1939.
978.6 F63f	Fletcher, Robert H., FREE GRASS TO FENCES: THE MONTANA CATTLE RANGE STORY, New York, University Publishers, 1960.
R 636.2 G13	Gallatin County Cowbelles and Gallatin Beef Producers, BRAND BOOK, GALLATIN COUNTY, STATE OF MONTANA, 1974.

Step VII. Resources (continued)

THE CATTLE INDUSTRY (continued)

F F909t	Russell, Charles M., TRAILS PLOWED UNDER, New York, Doubleday, 1927
R 636.2 St6	STOCKGROWERS' DIRECTORY OF MARKS AND BRANDS FOR THE STATE OF MONTANA, 1872 TO 1900. ALSO, A COMPLETE CLASSIFIED DIRECTORY OF SHEEP AND WOOL GROWERS. A FACSIMILE REPRINT OF THE VAN DERSAL AND CONNER'S DIRECTORY OF BRANDS, PUBLISHED IN 1900, Glendive, Dawson County Bicentennial Committee, 1974.
978.6 V27f	Van Cleve, Spike, 40 YEARS' GATHERIN'S, Kansas City, Missouri, Lowell Press, 1977.
978 W46g	Wellman, Paul I., THE GREATEST CATTLE DRIVE, Boston, Houghton Mifflin, 1964. (Nelson Story)

GEOGRAPHY

551.5 C91m	Cunningham, Carolyn, MONTANA WEATHER, (Information on weather records, big blizzards, tornadoes, northern lights), Helena, Montana Magazine, 1982.
917.86 M76	MONTANA MOUNTAIN RANGES, Helena, Montana Magazine, 1981.
R 912.786 T21m	Taylor, Robert L., MONTANA IN MAPS, 1974, Bozeman, Big Sky Books, Montana State University, 1974.

INDIANS, SACAJAWEA

B Salc	Clark, Ella E. and Margot Edmonds, SACAJAWEA OF THE LEWIS AND CLARK EXPEDITION, Berkeley, University of California Press, 1979.
970.3 Ew3b	Ewers, John Canfield, THE BLACKFEET, Norman, Oklahoma, University of Oklahoma Press, 1958.
B Salf	Frazier, Neta Lohnes, SACAJAWEA, THE GIRL NOBODY KNOWS, New York, McKay, 1967.

Step VII. Resources (continued)

INDIANS, SACAJAWEA (continued)

917.8 G16t	Garcia, Andrew, TOUGH TRIP THROUGH PARADISE, 1878-1879, Boston, Houghton Mifflin, 1967.
B Salh	Howard, Harold P., SACAJAWEA, Norman, Oklahoma, University of Oklahoma Press, 1971.
970.2 B56b	Neihardt, John C., BLACK ELK SPEAKS: BEING THE LIFE STORY OF A HOLY MAN OF OGLALA SIOUX, Lincoln, Nebraska, University of Nebraska Press, 1961.
B Sals	Schultz, James Willard, BIRD WOMAN (SACAJAWEA) THE GUIDE OF LEWIS AND CLARK, Boston, Houghton Mifflin, 1918.
970.3 Sch8b	Schultz, James Willard, BLACKFEET AND BUFFALO: MEMORIES OF LIFE AMONG THE INDIANS, Norman, Oklahoma, University of Oklahoma Press, 1962.
F W143s	Waldo, Anna Lee, SACAJAWEA, New York, Avon Books, 1978.

THE FUR TRADERS, MOUNTAIN MEN AND PIONEERS

B B76a	Alter, J. Cecil, JIM BRIDGER, Norman, Oklahoma, University of Oklahoma Press, 1962.
B B71b2	Burlingame, Merrill G., JOHN M. BOZEMAN, TRAILMAKER, Mississippi Valley Historical Review, 1941.
978 D49a	DeVoto, Bernard, ACROSS THE WIDE MISSOURI, Boston, Houghton Mifflin, 1947. (Illustrated with paintings by Alfred Jacob Miller, Charles Bodmer and George Catlin).
F G98b	Guthrie, A.B., THE BIG SKY, Boston, Houghton Mifflin, 1947.
F G98b	Guthrie, A.B., THE WAY WEST, New York, William Sloane Associates, 1949.
978 F92f	Hakola, John W., FRONTIER OMNIBUS, Missoula, Montana State University Press, 1962.

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Step VII. Resources (continued)

THE FUR TRADERS, MOUNTAIN MEN AND PIONEERS (continued)

978.02 M99s	Myers, John M., THE SAGA OF HUGH GLASS, Lincoln, Nebraska, University of Nebraska Press, 1963.
B B76j	Vestal, Stanley, JIM BRIDGER, MOUNTAIN MAN, New York, Morrow, 1946.
978.6 W66a	Willard, John, ADVENTURE TRAILS IN MONTANA, Helena, Montana, Reporter Printing Co., 1971.

GOLD, VIGILANTES, AND GHOST TOWNS

978.6 B28j	Barsness, Larry, GOLD GAMP: ALDER GULCH AND VIRGINIA CITY, New York, Hastings House, 1962.
364.9786 C13m	Callaway, Lew, MONTANA'S RIGHTEOUS HANDMEN, Norman Oklahoma, University of Oklahoma Press, 1982.

Step VIII. Evaluation

The following outlines a suggested formal evaluation format to utilize when teaching with this unit.

The blank form is intended to be reproduced for multiple use. The completed form is a sample of how to use the blank form.

EVALUATION WORKSHEET

Unit: ______________________________

Sub-unit: ______________________________

Core Area: ______________________________

	Student's Name: ______	______	______	______	______	
Instructional Objectives	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	TEACHER NOTES

1. Does not demonstrate competence
2. Demonstrates competence
3. Mastered

EVALUATION WORKSHEET

Unit: Gallatin History - Past to Present

Sub-unit: Wildlife K-1

Core Area: Math/Science

Instructional Objectives	**Student's Name:** Jon H. **1 2 3**	Anne H. **1 2 3**	Kristin L. **1 2 3**	Ray S. **1 2 3**	Susan T. **1 2 3**	**TEACHER NOTES**
Create verbal addition and subtraction problems.	2	2	3	1	2	Used mat organizers
Develop counting skills using manipulatives.	3	3	3	2	3	Used plastic animals then chips.
Construct a bar graph.	2	2	2	2	3	Only 2 variables begin w/concrete graph. Expand next time to pictorial.
Explore animal tracks.	2	2	2	2	2	Walking fieldtrip plus pets.
Categorize animals according to various characteristics.	2	1	2	1	2	Suggest extended work w/classifying attribute blocks for 1's.
Discuss idea that nature furnishes shelter for animals.	3	2	2	2	3	Pictures of animals and their shelters really helped.

1. Does not demonstrate competence
2. Demonstrates competence
3. Mastered

Appendix A: Grade Level Assignments

GRADE LEVEL ASSIGNMENTS

GRADE	SUB-UNIT
K-1	WILDLIFE SHELTER Connie Gates Kathy Butts Lois Hiebert Mary Jean Bunting
2	AGRICULTURE ETHNIC BACKGROUNDS Leslie Drummond Sandy Visser
3	FOLK LORE TIMBER Pat Hopper Anne Woodruff
4	EARLY EXPLORERS RANCHING Norma Heys Linda Rice
5	RAILROADS CITIES AND TOWNS Gladys Kauffman Clint Loomis
6	GOVERNMENT LIFESTYLES Carol Lark Nancy Drusch
7	ECOLOGY RECREATION Hillary Donaldson Sandy Hale
8	GEOGRAPHY NATIVE AMERICANS Lyn Morton Molly Siddoway-King
K-8	EDUCATION Peg Nelson

UNIT: GALLATIN HISTORY - PAST TO PRESENT

Appendix B: Alternative Sub-Units

UNIT: GALLATIN HISTORY - PAST TO PRESENT
Grade Levels K-8

ALTERNATIVE SUB-UNITS

Ancestry

Architecture

Arts

Climate

Communication

Cultural Growth

Economics

Festivals

Forestry

Future

Geology

Industry

Landmarks

Mining

Natural Resources

Occupations

Populations Growth

Seasons

Settlers

Yellowstone Park

* These sub-units are alternative strands that could be developed at any of the grade levels.